Debt Management Report

1998

Canada

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Purpose and Contents of Report

The *Debt Management Report* provides a review of federal debt operations for fiscal year 1997-98, as well as an update on federal debt management strategy and on federal debt programs up to October 30, 1998.

The report is divided into the following sections:

- an outline of the federal debt management environment;
- an overview of current federal debt management strategy[1] and the federal debt managers;
- details on the government's domestic and foreign-currency debt operations in 1997-98, including an update of activities up to October 30, 1998;
- the distribution of holdings of Government of Canada market debt; and
- a statistical summary of 1997-98 federal and agency debt operations.

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[1] In March, the federal government publishes the *Debt Management Strategy* which provides detailed information on the federal government's debt management strategy for the upcoming fiscal year.

Highlights

In 1997-98, the federal government achieved a budget surplus for the first time in almost 30 years.

As a result, the government has been able to begin paying down its debt.

A prudent debt structure is in place.

To maintain liquidity and market integrity in a declining debt environment, the government has recently taken a number of actions.

- At the end of March 1998, the federal government's net public debt totalled $579.7 billion and the budgetary surplus stood at $3.5 billion. This is the first budgetary surplus since 1969-70.
- As of March 31, 1998, the federal government's market debt[2] was $463.8 billion. During 1997-98, the federal government retired $9.6 billion of its market debt.
  - Domestic debt declined by $13.7 billion in 1997-98, largely through a decline in Treasury bill stock.
  - Foreign debt increased by $4.2 billion. The increase in foreign borrowing is consistent with the plan announced in recent budgets to bring the level of Canada's international reserves more in line with other sovereigns.
- During the first seven months of the current fiscal year, the government retired an additional $19.3 billion[2] of market debt. In total, up to October 30, 1998[3], $28.9 billion of market debt had been retired.
- Reduced exposure to changes in interest rates has been achieved by increasing the share of the government's gross debt in fixed-rate form to two-thirds at October 30, 1998. The adjustment in debt structure has significantly reduced the government's short-term borrowing needs.
- Canada's capital market remains one of the most efficient capital markets in the world with a high turnover of Government of Canada securities and low bid-offer spreads. The federal government implemented a number of changes in 1997-98 to enhance market integrity and ensure a well-functioning market, including:
  - changing the Treasury bill issuance from a weekly to a two-week cycle;
  - eliminating the issuance of 3-year bonds and reducing the frequency of 30-year bonds;
  - revising the auction rules for Government of Canada securities; and
  - contributing to the development of the Investment Dealers Association (IDA) Code of Conduct governing the trading of debt securities in the secondary market.

Fiscal 1997-98 Debt Program (billions of C$):

	March 31, 1997	Net new issuance	March 31, 1998
Domestic debt	450.4	-13.7	436.7
Foreign debt	23.0	4.2	27.2
Total market debt[2]	**473.4**	**-9.6**	**463.8**

Note: May not add due to rounding.

[2] For debt management purposes, market debt is defined as the portion of debt funded in the public markets and includes marketable bonds, Treasury bills, non-marketable retail debt (primarily Canada Savings Bonds) and foreign-currency-denominated bonds and bills. However, it should be noted that in other Department of Finance publications, market debt also includes bonds issued to the Canada Pension Plan (CPP). During the first seven months of the current fiscal year, $18.4 billion of market debt was retired when bonds issued to the CPP were included.

[3] Caution should be exercised in extrapolating these monthly results to gain an assessment of the possible outcome for the year as a whole. Some of the improvement to date was due to special factors or one-time developments.

Fiscal Environment

Achievement of a budget surplus means that the government is paying down its debt.

In 1997-98, the federal government achieved a budgetary surplus for the first time since 1969-1970. Over the period April 1997 to March 1998, the budgetary surplus totalled $3.5 billion compared to a budgetary deficit of $8.9 billion in the same period in 1996-97. In 1997-98, a financial surplus of $12.7 billion was reported (excluding foreign exchange transactions), up from $1.3 billion in 1996-97. A financial surplus means that the government did not need to borrow new money from financial markets. Including foreign exchange transactions, the net financial surplus stood at $10.6 billion. With a commitment to balanced budgets in the next two fiscal years as well, the government will remain in an ongoing net financial surplus position. This will allow the government to steadily pay down its market debt.

The debt-to-GDP ratio is falling. The federal government is committed to continue reducing its market debt.

The best indicator of the burden of debt on the economy is the debt-to-gross domestic product (GDP) ratio. As a share of Canada's economy (or GDP), the net debt fell to 66.9 per cent in 1997-98 from 70.3 per cent in 1996-97 – a 3.4-percentage-point decline. This decline in the debt-to-GDP ratio is the largest single-year decline since 1956-57. Through its Debt Repayment Plan, the government is committed to ensuring that the debt-to-GDP ratio continues on a permanent downward track.

During the first seven months of the current fiscal year, the federal government achieved a financial surplus (excluding foreign exchange transactions) of $4.7 billion, up by $1.2 billion over the same period last year. As a result, market debt had fallen by $19.3 billion as at October 30, 1998.

Public debt charges as a percentage of budgetary revenues – the interest ratio – declined from 31.9 per cent in 1996-97 to 26.7 per cent in 1997-98. This means that the government spent about 27 cents of every revenue dollar in 1997-98 for interest on the public debt. Due to the size of the debt stock, variations in interest rates can significantly affect total debt costs. The cost of debt service underscores how important the management of the public debt is to all Canadians.

The Debt Repayment Plan

The Debt Repayment Plan is based on three key elements:

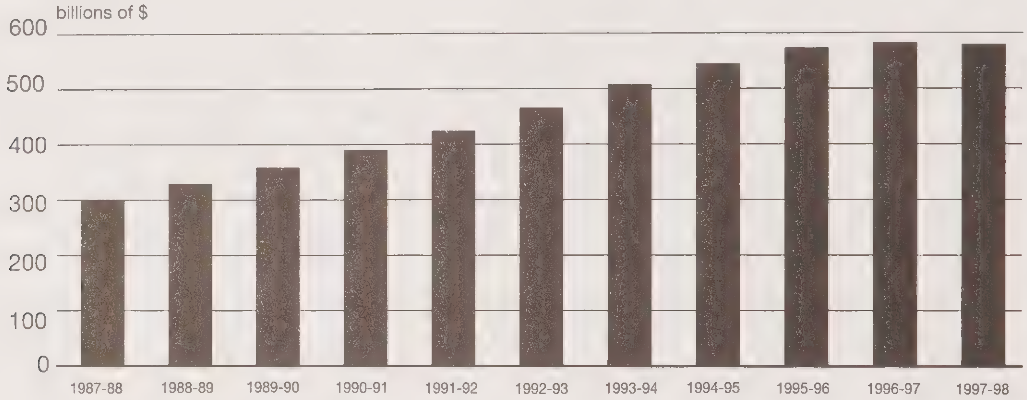
- two-year fiscal plans based on prudent economic planning assumptions; the current plan commits to balanced budgets in 1998-99 and 1999-2000;
- the inclusion in the fiscal plan of a Contingency Reserve of $3 billion in each year; and
- the use of the Contingency Reserve, when it is not needed, to pay down the public debt.

Size and Structure of the Federal Debt

With the achievement of a budgetary surplus, gross debt has stopped growing.

The 1997-98 budgetary surplus brought the federal government's net public debt – gross federal debt net of the government's financial assets – down to $579.7 billion from $583.2 billion in 1996-97. Net public debt is the best measure of the federal government's financial position. Gross public debt at the end of March 1998 totalled $638.5 billion. With the achievement of a budgetary surplus, gross debt has stopped growing.

Chart 1
Evolution of Net Federal Debt

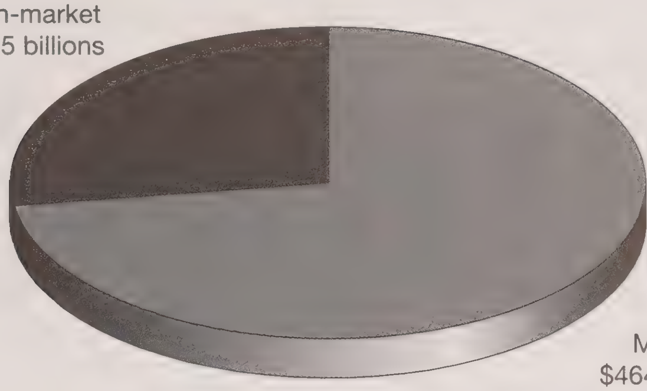


Source: *Public Accounts of Canada*

The government has two types of debt: market debt and non-market debt.

The gross federal debt is made up of two major components: market debt and non-market debt. Market debt is the portion of debt that is funded in the public markets and includes marketable bonds, Treasury bills, non-marketable retail debt (primarily Canada Savings Bonds) and foreign-currency-denominated bonds and bills. At March 31, 1998, market debt outstanding was $464 billion. Non-market debt includes the government's internal debt which is, for the most part, federal public sector pension liabilities, the government's current liabilities (e.g., accounts payable, accrued liabilities, interest and payment of matured debt), and bonds issued to the Canada Pension Plan. At March 31, 1998, non-market debt totalled $175 billion.

Chart 2
Gross Federal Debt 1997-98



Source: *Public Accounts of Canada*

Sensitivity of debt charges to interest rate changes has been cut in half for the first year.

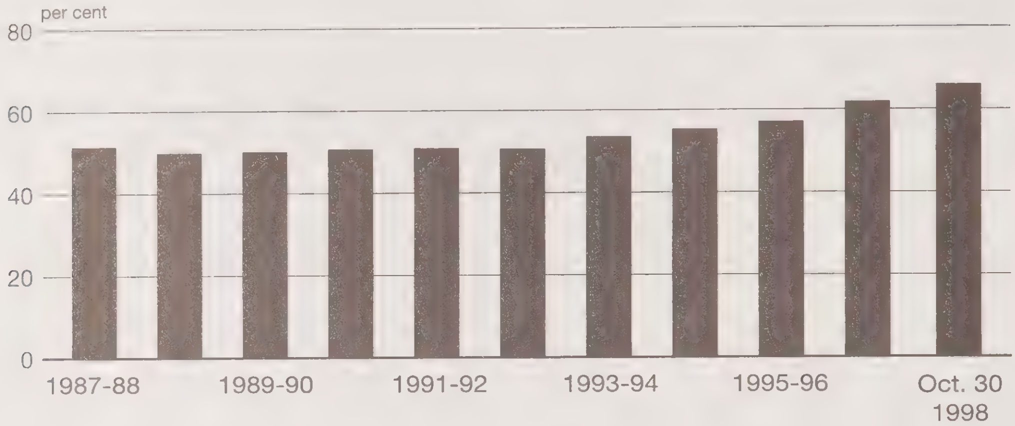
In 1997-98, the federal government continued to restructure its debt stock to ensure that it is less sensitive to unexpected changes in interest rates. It has achieved this by increasing the fixed-rate share[4] of the government's gross debt to 65 per cent in 1997-98 from 53 per cent in 1993-94 (Chart 3). As a result, the impact of a 100-basis-point increase in interest rates on the budget balance in the first year of the increase is now about $800 million lower today than at the time of the 1995 budget (i.e. $1 billion compared to $1.8 billion).

The government plans to maintain a prudent debt structure.

The fixed-rate share target for 1998-99 is set at two-thirds of the debt. Due to the fiscal surplus achieved up to October 30, 1998, this target has been achieved.

[4] The fixed-rate share of the debt is the percentage of the gross debt excluding non-interest-bearing liabilities that matures or is repriced in more than one year.

Chart 3
Fixed-Rate Share of Gross Debt



Source: Department of Finance

Federal Debt Managers

The Department of Finance, in conjunction with the Bank of Canada and Canada Investment & Savings (CI&S), the government's retail debt agency, manages the federal market debt. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, including borrowings for official reserve purposes and the management of financial risks.

The Division works in partnership with the Bank of Canada, the government's fiscal agent, on all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management – e.g., conducting the auctions of government debt, issuing debt instruments, making interest payments and foreign-currency borrowing operations. The Bank also has responsibility for monitoring market activities and advising on debt management policy issues, as well as co-ordinating risk management activities.

Primary responsibility for the management of the retail debt portion of the federal market debt is carried out by CI&S. A special operating agency of the Department of Finance, CI&S is responsible for achieving the fundamental debt management objective of stable, low-cost funding by developing and implementing the retail debt program.

Overview of the Federal Debt Management Strategy[5]

Recent Debt Strategy Initiatives

The fundamental debt management objective is to raise stable, low-cost funding for the government. A key strategic objective is the maintenance of a well-functioning domestic capital market. The federal government has taken a series of initiatives in 1997-98 and in the current fiscal year to achieve these objectives (see Table 1 for an overview).

Maintaining a prudent debt structure remains a priority.

Maintaining a prudent debt structure is essential in protecting the government's fiscal position from unexpected changes in interest rates. A new target for the fixed-rate share of the debt has been set to two-thirds of the debt. As of October 30, 1998, this target was achieved.

The government is committed to maintaining and enhancing a well-functioning market.

To enhance the liquidity of Government of Canada securities and ensure a well-functioning market, the issuance of 3-year bonds was eliminated and the weekly cycle of Treasury bill auctions was replaced by a biweekly cycle in 1997-98. For the current fiscal year, the frequency of issuance of 30-year bonds was reduced to two times per year and a pilot bond buy-back program was launched. The purpose of the bond buy-back program is to buy back existing, less liquid bonds to maintain liquidity in the primary market.

Auction rules were revised to reinforce the integrity of the primary market.

The federal government has been working closely with market participants on a number of initiatives to enhance market integrity. In August 1998, the Department of Finance and the Bank of Canada released revised rules pertaining to auctions of Government of Canada securities and the Bank of Canada's surveillance of the auction process. These new rules, which became effective in October 1998, are designed to reinforce the integrity of the auction process and encourage broad participation in it. The revisions also include a new classification of government securities distributors, a subgroup of dealers called primary dealers, a definition of a bidding entity, procedures for the submission of bids, new bidding limits for government securities distributors, and bidding limits for customers of government securities distributors. In addition, the Bank of Canada intends to increase its monitoring of Government of Canada securities markets, including ongoing reporting by auction participants and enhanced reporting to help ensure market integrity.[6]

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[5] Further details on the 1998-99 strategy can be found in the *Debt Management Strategy 1998-99*, released in March 1998.

[6] Further details of these changes are available on the web site of the Bank of Canada at: www.bank-banque-canada.ca

Table 1
Overview of Debt Management Strategy for 1997-98 and 1998-99

Strategy	Initiatives 1997-98	Initiatives 1998-99
Maintain a prudent debt structure	• The target for the fixed-rate share of the debt of 65% was achieved in August 1997.	• The fixed-rate target increased to two-thirds of the debt and was achieved by October 30, 1998.
Maintaining and enhance a well-functioning market	• In September 1997, the weekly cycle of Treasury bill auctions was replaced by a two-week cycle and the maturity of 3-month Treasury bills was lenghtened by seven days to 98 days. • In April 1997, the issuance of 3-year bonds was eliminated. • Consultations took place with market participants on changes in auction rules to reduce potential for manipulative behaviour prior to and during auctions. • Discussions were held with the IDA on the IDA Code of Conduct to establish standards for trading debt securities in the secondary market.	• The pilot bond buy-back program was launched. • In April 1998, the issuance of 30-year bonds was reduced to a semi-annual frequency. • In September 1998, the IDA Code of Conduct (Policy No. 5) was approved by the Ontario Securities Commission and sent to all member firms. • In October 1998, new rules were implemented for auctions of Government of Canada securities, together with extended surveillance of the Government of Canada market by the Bank of Canada.
Diversify the investor base	• In March 1997, a Euro Medium-Term Note program was launched. • CI&S introduced more savings options for Canadians, including holding bonds in RRSPs and RRIFs and the launching of the new Canada Payroll Savings program.	• In June 1998, a jumbo DM global bond was issued, and in October 1998 an inaugural FF 4 billion bond was issued. • In the fall of 1998, the Canada Premium Bond was introduced and sold concurrently with the CSB, and continuous sales to April 1, 1999 are being piloted. Extension of the new Canada Payroll Savings program continues.

An IDA Code of Conduct was developed to reinforce the integrity of the secondary market.

Parallel to the development of the revised rules, the federal government participated in the development of the IDA Code of Conduct, establishing standards for the trading of debt securities in the secondary market. This initiative is linked to Government of Canada securities through the new terms of participation in auctions for government securities distributors and customers.

Diversification of the investor base is being pursued on two fronts through the extension of the federal government's sources of funds in international markets and through Canada Investment and Savings, the government's retail debt agency. On the international front, the Euro Medium-Term Note (EMTN) program was launched in 1997. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand. Other initiatives undertaken by the federal government to diversify its investor base through international markets were the issue of the jumbo DM global bond in June 1998, and the inaugural FF issue in October 1998. Both issues, which were well received by international investors, also furthered the government's strategy of diversifying the assets held in the Exchange Fund Account as the proceeds were reinvested in DM and FF assets.

Continuing Debt Strategy Initiatives

The federal government will continue to maintain the principles of liquidity, transparency and regularity in its debt management program.

The government's continuing debt strategy initiatives fall into two categories:

- maintaining a transparent and liquid federal debt program; and
- providing active support for broader market initiatives.

Federal Debt Program Features

A transparent debt strategy preannouncing auction calendars and building large bond benchmarks are key elements in improving the liquidity, transparency and efficiency of the Canadian bond market.

The annual debt strategy and quarterly bond auction schedule announcements are made to increase the market's knowledge about future debt operations to promote efficiency in the market. The debt strategy announcement includes the target for the fixed-rate share of the debt and the specifics about the major elements of the debt program. The 1998-99 debt strategy press release announced:

- a new target for the fixed-rate share of the debt set at two-thirds of the debt;
- a modestly lower bond program compared to the previous fiscal year and a decrease in Treasury bill stock by about 10 per cent;
- a change in issuance frequency of the 30-year bond from a quarterly to semi-annual basis; and
- continuance of building large benchmark bonds at the 2-, 5-, 10- and 30-year maturities, with target sizes of $7 billion to $10 billion.

Table 2
Ongoing Federal Debt Initiatives Promoting Efficient Canadian Capital Markets

- Building large benchmarks
- Publishing a quarterly bond auction calendar
- Making debt strategy and operations transparent
- Using common coupon dates
- Book-based electronic clearing and settlement

Domestic Market Initiatives

Beyond the design and implementation of the federal debt program, the government pursues greater liquidity and efficiency through support for private sector initiatives in the domestic fixed-income market.

In particular, the Department of Finance and the Bank of Canada have worked with the Montreal Exchange and the investment community in developing a liquid domestic Government of Canada futures market. There is a highly successful futures contract based on 3-month bankers' acceptance rates (the BAX contract) and active 10- and 5-year Government of Canada bond futures contracts (the CGB and CGF contracts).

The federal government continues to provide support to initiatives aimed at promoting the Government of Canada futures market.

The government has also provided active support for improved market price transparency by supporting the development of a screen-based information system on prices and trades in the secondary market in Government of Canada securities.

The efficiency of the Canadian market is facilitated through the placement of all Government of Canada Treasury bills and bonds on an electronic clearing and settling system. Federal government bonds were placed on the Debt Clearing System (DCS) of the Canadian Depository for Securities (CDS) in 1994, and Treasury bills were put on the DCS in November 1995.

The government also assists the Government of Canada strip bond market by letting the DCS provide separate CUSIP (Committee on Uniform Security Identification Procedures) numbers for each cash flow and allowing the reconstitution of cash flows back into conventional bonds.

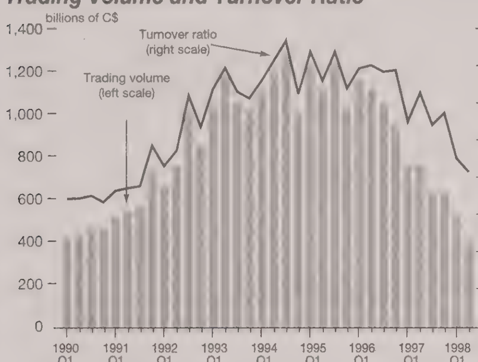
Ongoing support for initiatives that help promote the strip, swap and repo markets is also provided by the federal government.

Government of Canada Securities Market

Canada's fixed-income market has become one of the most efficient in the world. Indicators of the efficiency, liquidity and depth of the market include tight bid-offer spreads for the various fixed-income instruments, the large volume of transactions and high turnover ratios.

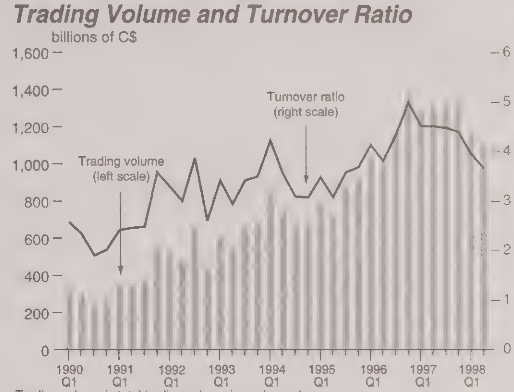
The volume of transactions in the Government of Canada bond market has grown significantly over the last eight years. The volume of transactions in the Treasury bill market had increased sharply from 1990 to 1995, but has since declined as the stock of Treasury bills outstanding has fallen. In the second quarter of 1998, total Treasury bill turnover was $392 billion. The quarterly turnover ratio was 4.1 in 1998Q2 (see Chart 4). Total marketable bond turnover was $1,121 billion in the second quarter of 1998, a 240-per-cent increase from the first quarter of 1990. The quarterly turnover ratio was 3.7 in 1998Q2 compared to 2.6 in the first quarter of 1990 (see Chart 5).

Government of Canada Treasury Bills Trading Volume and Turnover Ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

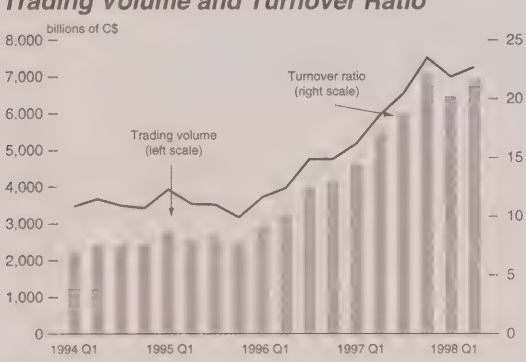
Government of Canada Bonds Trading Volume and Turnover Ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

The significant growth in the trading volume and turnover ratios in the repo market over the past two years provides further evidence of an extremely efficient Canadian government securities market. Since the first quarter of 1994, the total quarterly turnover for Government of Canada bond repos has increased from $2,194 billion to $6,904 billion in the second quarter of 1998. Furthermore, the quarterly turnover ratio for bond repos in 1998Q2 was 23, up from about 11 in early 1994 (see Chart 6). The Treasury bill repo market is less active than the bond repo market; nevertheless, it is quite efficient with total quarterly turnover in 1998Q2 at $521 billion and a quarterly turnover ratio of 5.5 (see Chart 7).

Government of Canada Bond Repos Trading Volume and Turnover Ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

Government of Canada Treasury Bill Repos Trading Volume and Turnover Ratio

Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

Results of 1997-98 Government of Canada Debt Management Operations and Cash Management

(includes updates as of October 30, 1998)

Overview

As a result of the budgetary surplus achieved in 1997-98, the federal government retired $9.6 billion of its market debt during this period. Total domestic debt alone declined by $13.7 billion. The share of market debt held in short-term instruments, primarily Treasury bills, decreased while the share held in longer-term instruments increased.

Table 3
Composition of Federal Market Debt
(billions of C$)

	March 31, 1997	March 31, 1998	October 30, 1998
C$-Denominated			
Fixed-coupon bonds	274.5	284.7	286.8
RRBs	8.0	9.9	10.7*
Treasury bills	135.4	112.3	86.7
Non-marketable retail debt	32.5	29.8	27.8
Foreign-Currency-Denominated			
Canada Bills	8.4	9.4	11.2
Foreign bonds	12.5	14.7	17.9
Canada Notes	2.1	1.7	0.7
Euro Medium-Term Notes	0.0	1.5	2.7
Total	**473.4**	**463.8**	**444.5**

Note: May not add due to rounding.

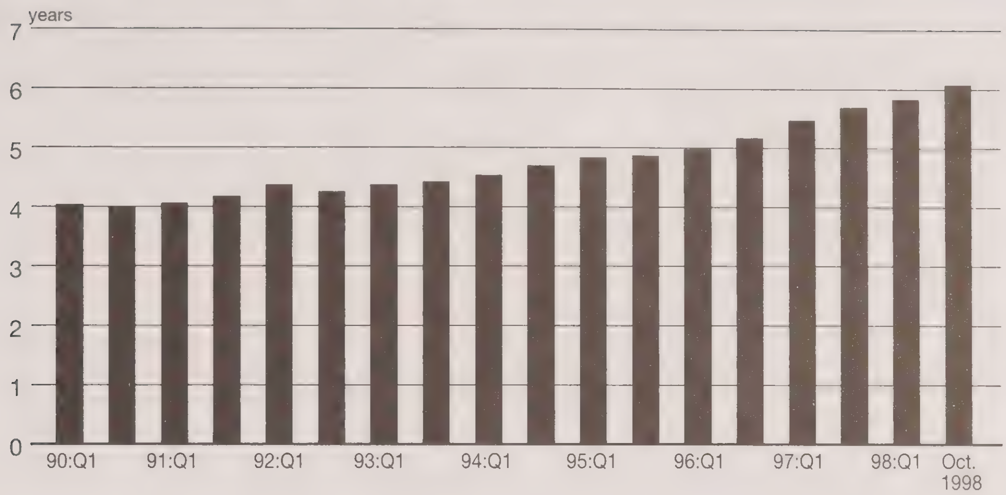
* RRB numbers for October 1998 do not include CPI adjustment so far this year.

Foreign reserves increased in 1997-98, consistent with the government's announcement in the 1996 and 1998 budgets to bring the level of Canada's international reserves more in line with other sovereigns.

Up to October 30, 1998, domestic debt declined by $24.6 billion while foreign-currency-denominated debt increased by $5.2 billion. As a result, total market debt declined to $444.5 billion.

The gradual change in the composition of the debt has led to an increase in the average term to maturity (ATM) of the federal market debt, from 4.0 years in January 1990 to 6.1 years in October 1998 (Chart 8).

Chart 8
Average Term-to-Maturity of Marketable Debt



Source: Bank of Canada

Domestic Debt

Fixed-Coupon Marketable Bonds

Fixed-coupon marketable Government of Canada bonds are issued in Canadian dollars and pay interest semi-annually.

Net new issuance of fixed-coupon marketable bonds during the year totalled $10.2 billion (gross issuance less maturing issues), bringing the stock outstanding of marketable bonds to $284.7 billion as at March 31, 1998. In comparison, net new issuance was $27.9 billion in the previous fiscal year and outstanding fixed-coupon marketable bonds stood at $274.5 billion at the end of March 1997.

In 1997-98, gross issuance of fixed-coupon marketable bonds consisted of $14.0 billion of 2-year bonds, $9.9 billion of 5-year bonds, $9.3 billion of 10-year bonds and $5.0 billion of 30-year bonds (issuance of 3-year bonds ceased in 1997-98). Fixed-coupon marketable bonds represent the largest component of the federal government's outstanding market debt.

The distribution of the outstanding stock of fixed-coupon marketable bonds at the end of 1997-98 and as of October 30, 1998 is shown in Table 4.

Table 4
Outstanding Fixed-Coupon Marketable Bonds (billions of C$)

	March 31, 1998	October 30, 1998
0-2 years	80.9	78.4
2-5 years	69.9	78.2
5-10 years	71.5	74.9
10-30 years	62.5	55.3
Total	**284.7**	**286.8**

Note: May not add due to rounding.

Status as of October 30, 1998

The outstanding stock of fixed-coupon marketable bonds was $286.8 billion at the end of October 30, 1998.

Real Return Bonds (RRBs)

Real Return Bonds, introduced in 1991, provide cost-effective diversification of the marketable bond program for the government as the implied real rates on comparable nominal bonds generally exceed the real rate offered on RRBs. RRBs serve the needs of real return investors such as indexed pension funds.

Issuance of RRBs in 1997-98 totalled $1.7 billion through four issues, bringing the level outstanding of RRBs to $9.9 billion as at March 31, 1998 (including $0.7 billion in Consumer Price Index (CPI) adjustment). RRBs are issued via quarterly single-price auctions.

Status as of October 30, 1998

At October 30, 1998, the outstanding stock of RRBs was $10.7 billion including one issue of RRBs in the April to October 1998 period. The program for 1998-99 incorporates four RRB issues having a total issuance target of up to $2 billion.

Treasury Bills

Treasury bills with terms to maturity of approximately three, six and 12 months are offered on a biweekly basis. Cash management bills of shorter maturity than regular Treasury bills are issued from time to time to facilitate the management of the government's cash balances.

The stock of outstanding Treasury bills decreased by $23.1 billion during the 1997-98 fiscal year to a level outstanding of $112.3 billion at March 31, 1998. To maintain the liquidity of this market given reduced issuance, Treasury bill auctions changed from a weekly to a two-week cycle in September 1997, and the maturity of 3-month Treasury bills was lengthened by seven days to 98 days, to make it fungible with longer-dated Treasury bills.

Status as of October 30, 1998

The Treasury bill stock has continued to decline significantly over the first seven months of the current fiscal year as the financial surplus continues to increase. Treasury bills outstanding at October 30, 1998 totalled $86.7 billion.

Canadian Dollar Interest Rate Swaps

There were no new domestic interest rate swaps to raise floating rate funding in 1997-98.

Retail Debt

Retail debt is broadly defined as Government of Canada securities held by individual Canadians, and includes both non-marketable and marketable debt.

In 1997-98, there were two investment products within the retail non-marketable debt program: the Canada Savings Bond (CSB) and the Canada RRSP Bond, now renamed the Canada Premium Bond. The Canada Premium Bond features longer-term pricing but with less liquidity. Both bonds can now be held within or outside registered retirement savings plans (RRSPs) and registered retirement income funds (RRIFs).

The retail debt share, including both non-marketable and marketable debt, of the Government of Canada total market debt remained stable in the last year. This stopped the decline of the last decade, thereby contributing to the government's objective of maintaining a diversified investor base. The non-marketable component of retail debt decreased by $2.7 billion in 1997-98, largely offset by an increase in the individual holdings of marketable debt.

Status as of October 30, 1998

In 1998-99, two products will be offered at the same time: the Canada Savings Bond and the new Canada Premium Bond (formerly known as the Canada RRSP Bond). Both bonds will also be on sale for six continuous months from early October until April 1, providing Canadians with more convenient access to these products than the single three-week period in past years. In addition, the new Canada Payroll Savings program has been rolled out to about 300,000 Canadians.

Foreign-Currency Debt

Foreign borrowing is becoming a much more significant element of debt operations. Canada borrows in foreign currencies to raise foreign exchange reserves for the Exchange Fund Account (EFA). The EFA is a pool of assets used to promote the order and stability of the Canadian dollar in the foreign

exchange market. Foreign exchange reserves are also held for general liquidity purposes. The major objectives of Canada's reserve program are to raise adequate reserves, minimize the cost of carrying reserves, immunize foreign exchange and interest rate risk, and prudently manage refinancing risk.

Foreign reserves increased in 1997-98, which is consistent with the government's announcement in the 1996 and 1998 budgets to raise the level of reserves in order to bring Canada in line with other sovereigns.

As of March 31, 1998, foreign-currency liabilities stood at US$24.4 billion – (US$19.1 billion in foreign-currency debt and US$5.3 billion in cross-currency swaps).

Canada's foreign currency debt amounts to less than 6 per cent of its outstanding market debt.

Foreign-currency debt outstanding consists of Canada Bills, Canada Notes, Euro Medium-Term Notes and marketable bonds. Canada also obtains foreign-denominated funding through cross-currency swaps on domestic bonds. Annex 1 provides further details on Canada's foreign-currency debt.

Table 5
Foreign-Currency Liabilities (as of March 31, 1998)

	billions of US$
Canada Bills	6.6
Canada Notes	1.2
Floating Rate Notes	2.0
LIBOR-25bps, due 15 February 1999	
Euro-Medium Term Notes	1.1
Global Bonds	
6½% US$ bonds due 30 May 2000	1.5
6½% US$ bonds due 30 May 2001	1.0
6⅛% US$ bonds due 15 July 2002	1.0
5⅝% US$ bonds due 19 February 2003	2.0
6⅜% US$ bonds due 21 July 2005	1.5
6¾% US$ bonds due 28 August 2006	1.0
6⅝% NZ$ bonds due 3 October 2007	0.3
Total foreign-currency debt	**19.1**
Cross-currency swaps	5.3
Total foreign-currency liabilities	**24.4**

Note: May not add due to rounding.

Canada Bills and Canada Notes

Canada Bills, which are short-term promissory notes denominated in U.S. dollars, are issued in the U.S. market as a source of low-cost U.S. dollar funding. The level of outstanding Canada Bills increased from US$6.1 billion to US$6.6 billion during 1997-98. Net issuance decreased compared to 1996-97 levels.

Canada Notes are used as required to raise fixed and floating rate funding for terms longer than nine months. The stock of outstanding U.S. medium-term notes, which the government began to issue in March 1996, decreased from US$1.5 billion to US$1.2 billion during 1997-98.

Status as of October 30, 1998

In the first seven months of the current fiscal year, the outstanding amount of Canada Bills increased by US$0.7 billion. The outstanding stock of Canada Notes stood at US$0.5 billion as of October 30, 1998.

Euro Medium-Term Notes

The EMTN program, introduced in March 1997, diversifies the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under the new program can be denominated in a range of currencies and structured to meet investor demand. Obligations are swapped to U.S. dollars, the primary currency held in the foreign exchange reserves. In 1997-98, the federal government executed six transactions under the EMTN program (see Annex 1 for details).

Status as of October 30, 1998

Six other issues were done under the EMTN program this fiscal year: Hong Kong dollar 200 million three-year notes, Greek drachma 20.0 billion five-year notes, US$75 million one-year notes, US$200 million one-year notes, British pound 200 million six-year notes, and a FF 4 billion issue.

Foreign-Currency-Denominated Bonds

At the end of 1997-98, Canada had US$8.3 billion in fixed-rate bonds (of which US$3.3 billion were issued in 1997-98) and US$2.0 billion Floating Rate Notes (issued in 1993-94) were outstanding. The US$3.3 billion of fixed-rate bonds issued in 1997-98 consisted of three global bonds (see Annex 1 for details).

Status as of October 30, 1998

Since March 31, 1998, the federal government has issued a Deutsche mark US$4.0 billion 4⅞-per-cent global bond due July 7, 2008. The transaction was well received by investors and has further reinforced Canada's reputation in the international capital markets. Proceeds were invested in DM assets as an initial step to diversify the government's reserve assets in major reserve currencies. In October 1998, the federal government also issued a US$2.5 billion 5¼-per-cent global bond due November 5, 2008.

Cross-Currency Swaps

Cross-currency swaps of domestic obligations are an alternative to bond issues as a means of meeting the government's targets for longer-term foreign-currency funding. In 1997-98, the federal government raised US$3.6 billion in foreign exchange reserves at attractive funding levels by entering into 13 cross-currency swaps. This is a significant increase from the previous fiscal year when the government entered into only two cross-currency swaps to raise US$1 billion in foreign exchange reserves. The total amount of cross-currency swaps outstanding as of March 31, 1998 stood at US$5.3 billion.

Status as of October 30, 1998

In the first seven months of the current fiscal year, the federal government entered into 22 cross-currency swaps, raising an additional US$2.0 billion and bringing the total amount of cross-currency swaps to US$7.3 billion.

The Management of the Government's Cash Balances

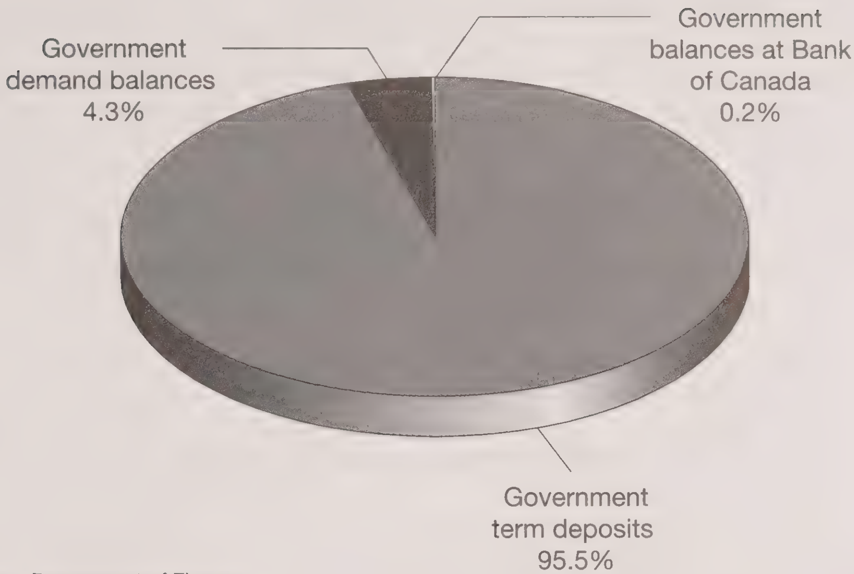
The main priorities in managing cash balances are to ensure that the government has sufficient cash to meet its operating requirements. This requires careful forecasting and monitoring of the daily flows, as well as an ongoing borrowing program to refinance maturing debt and maintain the balances at the targeted level. There is inherent uncertainty in forecasting daily changes in cash balances, owing to the scope of the government's financial operations, the operations of the Bank of Canada and the volatility of markets. An adequate level of cash balances must be maintained at all times to meet operational requirements, including adjustment to changes in market conditions.

All cash balances are invested with direct clearing members of the Canadian Payments Association (CPA) as either term or demand deposits through an auction process. In order to earn competitive market rates of return, balances in excess of daily operating requirements have been auctioned to direct clearers as term deposits since 1986. In 1989, the auction format was extended to demand deposits.

The level of the government's daily cash balances (term and demand) averaged $8.1 billion in fiscal 1997-98, higher than the average daily cash balance of $5.7 billion in 1996-97.

As previously mentioned, cash balances are invested in the market. Term deposits, typically for terms ranging between one and seven days, averaged $7.8 billion, $2.5 billion higher than the previous fiscal year. Earnings on term balances averaged 3.96 per cent, slightly higher than the average of 3.89 per cent in the prior year. Average demand balances, at $353 million, were $12 million lower than in 1996-97 and earned 2.81 per cent (compared to 2.99 per cent the previous year).

Chart 9
Average Level of Government of Canada Cash Balances, Fiscal Year 1997-98



Source: Department of Finance

Distribution of Holdings of Government of Canada Debt

Domestic Holdings of Government of Canada Debt

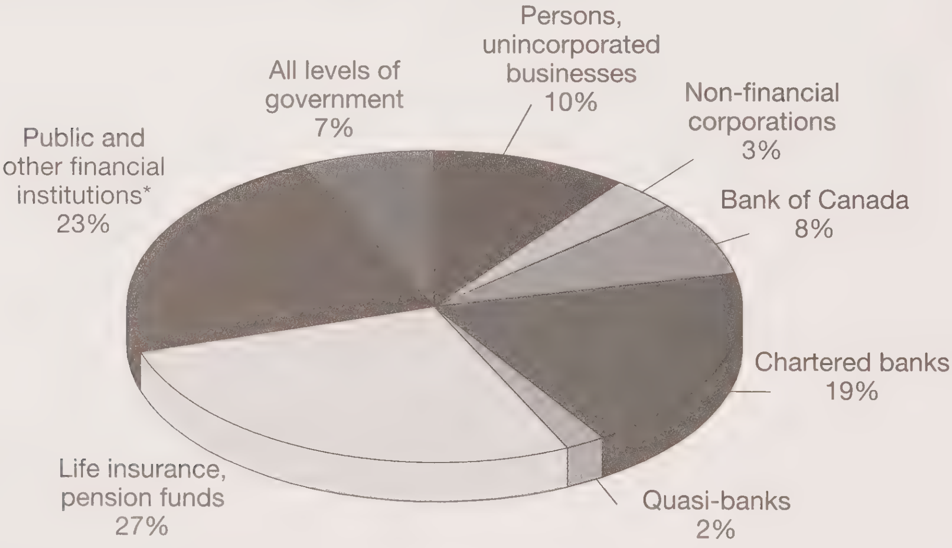
In 1997, life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (27 per cent), closely followed by public and other financial institutions.[7] Taken together, they accounted for 50 per cent of domestic holdings.

Persons and unincorporated businesses accounted for 10 per cent of domestic holdings, down almost 25 percentage points since 1990. The chartered banks' share of holdings of market debt has more than doubled since 1990, from 9 per cent to 19 per cent in 1997.

Bonds and bills held by public and other financial institutions also increased sharply over the 1990-1997 period – from 8 per cent in 1990 to 23 per cent in 1997. Much of the increase in the share of market debt held by public and other financial institutions can be attributed to a significant increase in mutual fund holdings.

Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

Chart 10
Distribution of Domestic Holdings of Government of Canada Market Debt, 1997



Total: $350.8 billion at December 31, 1997
*Source: Statistics Canada, *The National Balance Sheet Accounts*

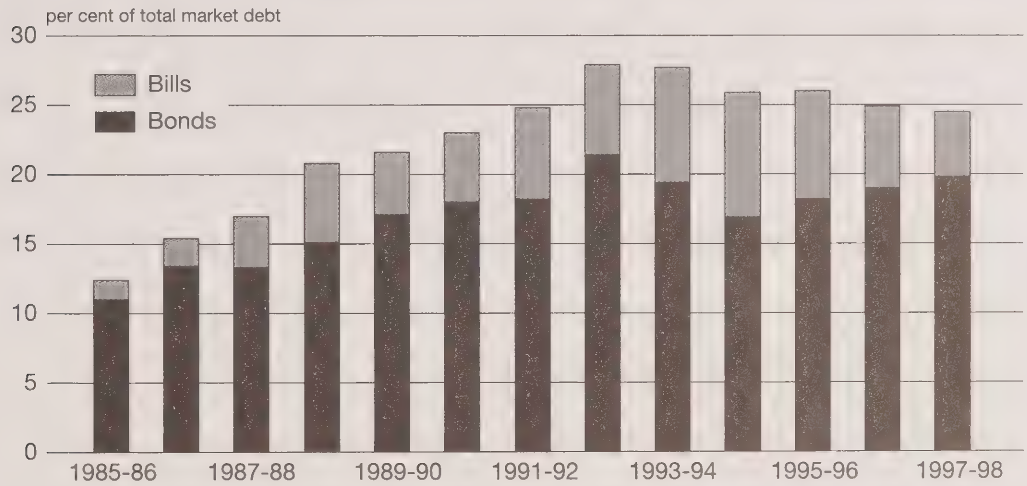
[7] Includes investment dealers, mutual funds, fire and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

Non-Resident Holdings of Government of Canada Debt

Non-resident holdings of the Government of Canada's market debt decreased by $6.0 billion in fiscal year 1997-98. Total non-resident holdings were estimated to be $114.4 billion at the end of March 1998, representing about 24.7 per cent of the Government of Canada's total market debt. Since 1992-93, the share of market debt held by non-residents has been steadily declining.

Non-residents held $92.3 billion in government bonds in 1997-98, an increase of $1.0 billion from the previous year. Non-resident holdings of bills amounted to 4.8 per cent of total market debt at March 31, 1998, down more than 1 percentage point from 1996-97. Non-resident holdings of bills (Treasury bills and Canada Bills) declined by $7.0 billion over the fiscal year (see Reference Table V).

Chart 11
Non-Resident Holdings of Government of Canada Debt



Source: Statistics Canada, *Canada's International Transactions in Securities*

Annex 1

Details on Canada's Foreign-Currency Debt, 1997-98

Foreign-Currency-Denominated Bonds

At the end of 1997-98, Canada had US$8.3 billion in fixed-rate bonds (of which US$3.3 billion was issued in 1997-98) and US$2.0 billion in Floating Rate Notes outstanding (issued in 1993-94).

The US$3.3 billion in fixed-rate bonds issued in 1997-98 consisted of three global bonds:

- in July 1997, a US$1.0 billion 6⅛-per-cent 5-year global bond due July 15, 2002;
- in October 1997, a New Zealand dollar 500 million (US$319 million equivalent) 6⅝-per-cent 10-year global bond due October 3, 2007; and
- in February 1998, a US$2.0 billion 5⅝-per-cent 5-year global bond due February 19, 2003.

Cross-Currency Swaps

In 1997-98, the federal government raised US$3.6 billion in foreign exchange reserves at attractive funding levels by entering into 13 cross-currency swaps, bringing the total cross-currency swaps to US$5.3 billion.[8]

Euro Medium-Term Notes (EMTNs)

In 1997-98, the federal government executed six transactions under the EMTN program:

- in July 1997, US$450 million 5½-per-cent 5-year notes due January 30, 2001 sold to Japanese retail investors (US$50 million was retired in September 1997);
- in July 1997, Japanese yen 5 billion Australian dollar 3.30-per-cent reverse dual currency notes (payment of principal is made in Japanese yen while interest payments are made in Australian dollars) due January 31, 2008 sold to Japanese institutions;
- in November 1997, Danish kroner 500 million 5¾-per-cent notes due December 22, 2004 sold to European retail investors;
- in November 1997, US$30 million deep discount 4.0-per-cent notes due November 19, 2007 sold to Japanese institutional investors;
- in February 1998, a series of Japanese yen notes totalling 2.4 billion with coupon rates from 0.01 per cent to 0.06 per cent due October 2, 2000; and
- in March 1998, British pound 300 million 6¼-per-cent notes due November 26, 2004.

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[8] Further details are available in Reference Table IX.

Annex 2

Government of Canada Market Debt Instruments

Fixed-Coupon Marketable Bonds

Effective October 1995, Government of Canada marketable bonds are issued in global certificate form only whereby a global certificate for the full amount of the bonds is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). The bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing System (DCS) operated by the CDS and only in integral multiples of $1,000 (face value). Prior to December 1993, Government of Canada bonds were issued in coupon-bearer and fully registered form, and were available in denominations ranging from $1,000 to $1,000,000. Between December 1993 and September 1995, Government of Canada bonds were only issued in fully registered form. All Canadian dollar marketable bonds are non-callable. All Canadian dollar marketable bonds pay a fixed rate of interest semi-annually.

Issues of fixed-coupon marketable bonds are sold via public tender, with the Bank of Canada acting as the government's fiscal agent, to primary distributors made up of securities dealers that operate in Canada and who are members of the Investment Dealers Association of Canada, and a small number of Canadian chartered banks. These sales are via multiple-price auction.

Government of Canada Real Return Bonds (RRBs)

Government of Canada Real Return Bonds pay semi-annual interest based upon a real interest rate. Unlike standard fixed-coupon marketable bonds, interest payments on Real Return Bonds are adjusted for changes in the Consumer Price Index (CPI). The CPI, for the purposes of RRBs, is the all-items CPI for Canada, not seasonally adjusted, published monthly by Statistics Canada. The semi-annual nominal coupon payments are calculated as follows:

coupon payment$_i$ = real coupon rate/2 * (principal + inflation compensation$_i$)
where inflation compensation$_i$ = ((principal * reference CPI$_i$/reference CPI$_{base}$)
principal).

The reference CPI for the first day of any calendar month is the CPI for the third preceding calendar month. The reference CPI for any other day in a month is calculated by linear interpolation between the reference CPI applicable to the first day of the month in which such day falls and the reference CPI applicable to the first day of the month immediately following. The reference CPI$_{base}$ for a series of bonds is the reference CPI$_i$ applicable to the original issue date for the series.

At maturity, bondholders will receive, in addition to a coupon interest payment, a final payment equal to the sum of the principal amount and the inflation compensation accrued from the original issue date – i.e. final payment = principal + ((principal * reference CPI$_{maturity}$/reference CPI$_{base}$) - principal).

These bonds must be purchased, transferred, or sold, directly or indirectly, through a participant of the DCS and only in integral multiples of $1000 (face value). New issue distribution is through single-price auction to primary distributors.

Canada Savings Bonds (CSBs)

CSBs are currently offered for sale by most Canadian financial institutions. To facilitate their purchase, many Canadians elect to purchase CSBs through payroll deductions.

Except in certain specific circumstances, Canada Savings Bonds can only be registered in the name of residents of Canada and are available in both regular interest and compound interest forms. Denominations range from $100 to $10,000. All CSBs are non-callable and, except in certain limited circumstances, non-transferable.

CSBs pay a competitive rate of interest which is guaranteed for one or more years. They may be cashed at any time and, after the first three months, pay interest up to the end of the month prior to encashment.

Canada Premium Bonds (CPBs)

The Canada Premium Bond is a new retail investment and savings product introduced by the Government of Canada in 1998 and replaces the Canada RRSP Bond. Like the CSB, it is available in most Canadian financial institutions.

The Canada Premium Bond offers a higher interest rate compared to the CSB and is only redeemable once a year on the anniversary of the issue date and during the 30 days thereafter without penalty.

Treasury Bills

Effective November 1995, all new issues of Treasury bills are issued is global certificate form only whereby a global certificate for the full amount of the Treasury bills is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). Treasury bills must be purchased, transferred, or sold, directly or indirectly, through a participant of the DCS operated by the CDS and only in integral multiples of $1,000 (face value). Prior to November 1995, Treasury bills were issued in bearer form and were available in denominations ranging from $1,000 to $1,000,000.

Treasury bills are sold by public tender on a discount basis to primary distributors of Government of Canada securities. Treasury bills with terms to maturity of approximately three, six, or 12 months are currently auctioned on a biweekly basis, generally on Tuesday for delivery Thursday. Under the biweekly issuance pattern, new 3-month (98 days) Treasury bills are issued at each biweekly auction. New 6- and 12-month Treasury bills are offered in the same week and then reopened once at the next regular auction two weeks later.

Cash Management Bills (CMBs) are also periodically issued by the Government of Canada. CMBs are Treasury bills with maturities of less than three months (they can be as short as one day) used as a source of short-term financing for the government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Canada Bills

Canada Bills are promissory notes denominated in U.S. dollars and issued only in book-entry form. They mature not more than 270 days from their date of issue and are discount obligations with a minimum order size of US$1,000,000 and a minimum denomination of US$1,000. Delivery and payment for Canada Bills occur in same-day funds through Chase Manhattan Bank in New York City.

Primary distribution of Canada Bills occurs through five dealers in New York: CIBC Wood Gundy Inc., CS First Boston, Goldman, Sachs & Co., Lehman Brothers and RBC Dominion Securities Inc. Rates on Canada Bills are posted daily for terms of one to six months.

Canada Bills are issued for foreign exchange reserve funding purposes only.

Canada Notes

Canada Notes are promissory notes usually denominated in U.S. dollars and available in book-entry form. Canada Notes are issued in denominations of US$1,000 and integral multiples thereof. At present, the aggregate principal amount outstanding issued under the program is limited to US$10.0 billion. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate.

The interest rate or interest rate formula, the issue price, stated maturity, redemption or repayment provisions, and any other terms are established by Canada at the time of issuance of the notes and will be indicated in the Pricing Supplement. Delivery and payment for Canada Notes occur through the Bank of Montreal Trust Company in New York City.

The notes are offered on a continuous basis by Canada through five dealers: CS First Boston, Goldman, Sachs & Co., Lehman Brothers, Nesbitt Burns Inc. and Scotia Capital Markets USA Inc. Canada may also sell notes to other dealers or directly to investors.

Canada Notes are issued for foreign exchange reserve funding purposes only.

Euro Medium-Term Notes (EMTNs)

EMTNs are medium-term notes issued outside the United States and Canada. EMTNs are issued with fixed or floating interest rates, include embedded options, make coupon payments in one currency and the principal payment in another currency, and maturities can range from short-term to long-term. Canada EMTNs are sold either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as Canada's agent for the particular transaction (called reverse inquiry). Canada EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs from Canada is responsible for the sale of the notes), and are sold on an intermittent basis.

The Arranger for Canada's EMTN program is Morgan Stanley & Co. International. The London-based dealer group includes CIBC Wood Gundy plc, Daiwa Europe Limited, Deutsche Morgan Grenfell, Goldman Sachs International, J.P. Morgan Securities Ltd., Merrill Lynch International, Morgan Stanley & Co. International, Nomura International, RBC Dominion Securities Inc., and UBS Limited.

The EMTN program further diversifies the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand.

Annex 3

New Auction Rules/Terms of Participation

Following extensive consultation with market participants, new auction rules and terms of participation relating to the primary distribution of Government of Canada securities were introduced on October 14, 1998. The new rules, which govern the participation of financial intermediaries and end-investors eligible to bid at auctions of Government of Canada securities, were designed to reinforce the integrity of the auction process and to encourage broad participation in it.

Under the new rules and terms of participation, there are 25 government securities distributors that participate in the primary distribution of bonds and Treasury bills. All government securities distributors must: (i) be members, or affiliates of members, of the Investment Dealers Association of Canada, and (ii) have their core trading and sales operations for Government of Canada securities resident in Canada.

Those government securities distributors which reach a specific threshold level of primary and secondary market activity in Government of Canada securities become a primary dealer, with commensurate responsibilities, and form part of the core group of distributors of Government of Canada securities. There are, at present, 15 primary dealers. The primary dealer designation can be attained for either Treasury bills or bonds, or both.

Primary dealers assume a number of responsibilities with respect to Government of Canada securities. They must comply with minimum bidding requirements for every Treasury bill and bond auction so as to provide coverage of auctions as a group, and consistently make two-sided markets in Treasury bills and bonds to a broad customer base. All government securities dealers have ongoing reporting requirements and special requirements to provide the Bank of Canada, on request, with market information (including trade activity and position reports) involving Government of Canada securities. In addition, all bidders at auctions of Government of Canada securities (including customers) must abide by the Investment Dealers Association Policy No. 5 governing standards for trading of debt securities in Canada.

There are bidding limits for government securities distributors and end-investors (or customers) at Treasury bill and bond auctions. For Treasury bill auctions, a primary dealer has a bidding limit for its own account of 25 per cent of each tranche being auctioned, while a government securities distributor has a limit of 10 per cent. The bidding limits for Government of Canada bond auctions vary by distributor depending on the firm's relative activity in the primary and secondary markets for these securities. Primary dealers have bond-bidding limits for their own account of between 10 per cent and 25 per cent of the amount of bonds being tendered, while government securities distributors have bond-bidding limits of between 1 per cent and 9 per cent.

The bidding limits for a customer for both Treasury bill and bond auctions are 25 per cent of the amount auctioned. Customer bids are submitted through government securities distributors.

The new rules feature several measures to ensure that the auction process cannot be used to help accumulate a controlling position in a Government of Canada security: each auction participant's bidding limit is reduced by the bidder's excess net long position (i.e. its net long position in excess of the product of its bidding limit and the par value of the outstanding stock of the security being auctioned); and the aggregate limit for the sum of bids submitted by a primary dealer for its own account and on behalf of its customers cannot exceed 40 per cent of the tender less the dealer's excess net long position.

More information on the new auction rules and terms of participation is available at the Bank of Canada's web site : www.bank-banque-canada.ca

Annex 4

Selected News Service Pages of Interest to Government of Canada Debt Market Participants

Bloomberg

WCR	– Exchange rates
PXCA	– Government of Canada benchmark bonds
PXCB	– Government of Canada bonds
CND	– Summary page of benchmark Canadian securities

Dow Jones Telerate

261	– Exchange rates
3105	– U.S./Canada capital markets
3109	– Quarterly bond auction schedule
3110	– Latest marketable bond auction results
3111	– Treasury bill auction results
3112	– Cumulative excess settlement balances/overnight rate
3143	– Multicontributor page – Government of Canada bonds
3144	– Multicontributor page – Canadian money markets
3159	– Canadian yield curve/spread differentials to U.S.
3190	– Canadian money markets
3193	– Cash management bill auction results
3195	– Latest RRB auction results
3196	– Government of Canada and provincial government bonds
3197	– 10:00 a.m. fixing – Canadian BA rates
3198	– 10:00 a.m. fixing – Government of Canada Treasury bills
9728	– 10:30 a.m. Bank of Canada jobber averages – money market instruments
27455	– 10-year CGB futures (Montreal Exchange)
27456	– BAX futures (Montreal Exchange)
27458	– 10-year bond cheapest-to-deliver (CGB futures) implied repo rate

Reuters

WRLD	– Exchange rates
BOFC	– Canadian dollar exchange rates
CRRBONDS	– Benchmark Government of Canada bonds and money markets
CAACTIVE= <F3>	– Government of Canada bonds and Treasury bills
CDMM	– Canadian money markets
CDBN	– Canadian bonds
CABONDT	– U.S./Canada capital markets
CDOR	– 10:00 a.m. fixing – Canadian BA rates
CDOS	– 10:00 a.m. fixing – Canadian Treasury bill rates
FPRH	– Swap quotes
BAX <F3>	– BAX futures (Montreal Exchange)
BAR <F3>	– BAR futures (Montreal Exchange)
BOC WATCH	– Bank of Canada auction information and history

Department of Finance – Government of Canada Securities Internet Address
http://www.fin.gc.ca/secur/gocsec_e.html
Bank of Canada Home Page Internet Address
http://www.bank-banque-canada.ca

Annex 5

Glossary

Budgetary Surplus: Occurs when government annual revenues exceed budgetary expenditures. A deficit is the shortfall between government revenues and budgetary spending.

Contingency Reserve: Funds set aside in the fiscal projections to provide a cushion against adverse changes in the economy. When the funds are not needed, the Contingency Reserve is used to pay down the public debt.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar on the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

Financial Requirements/Surplus: Measure the difference between the cash coming in to the government and the cash going out. In the case of a financial requirement, it is therefore the amount of new borrowing required from outside lenders to meet the government's financing needs in any given year.

Foreign Exchange Reserves: Stocks of foreign exchange assets (e.g., interest earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

Gross Public Debt: Total amount the government owes. It consists both of market debt in the form of outstanding securities such as Treasury bills and Canada Savings Bonds, and internal debt owed mainly to the superannuation fund for government employees and other current liabilities.

Interest-Bearing Debt: Consists of unmatured debt, or market debt, and the government's liabilities to internally held accounts such as federal employees' pension plans.

Market Debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets and includes marketable bonds, Treasury bills, retail debt (primarily Canada Savings Bonds) and foreign-currency-denominated bonds and bills.

Net Public Debt: Consists of interest-bearing debt and other liabilities, net of financial assets.

Non-Market Debt: Includes the government's internal debt which is, for the most part, federal public sector pension liabilities, the government's current liabilities (e.g., accounts payable, accrued liabilities, interest and payment of matured debt), and bonds issued to the Canada Pension Plan.

Reference Tables

Reference Table I

Gross public debt, outstanding market debt and debt charges

Fiscal year ending March 31	Gross public debt: Outstanding	Gross public debt: Fixed-rate portion[1]	Gross public debt: Total debt charges	Outstanding market debt[2]: Outstanding	Outstanding market debt[2]: Fixed-rate Portion	Outstanding market debt[2]: Total debt charges	Outstanding market debt[2]: Average interest rate
	($ billions)	(per cent)	($ billions)	($ billions)	(per cent)	($ billions)	(per cent)
1985-86	274.8	51.9	25.4	200.8	36.8	20.7	10.68
1986-87	308.9	50.9	26.7	226.8	37.2	21.5	9.37
1987-88	340.1	51.2	29.0	248.3	38.6	23.1	9.62
1988-89	371.5	49.6	33.2	273.3	37.6	26.5	10.83
1989-90	397.2	49.9	38.8	291.5	38.5	31.4	11.22
1990-91	433.3	50.4	42.6	320.4	38.9	34.3	10.73
1991-92	467.4	50.7	41.2	348.4	39.3	32.4	8.85
1992-93	503.9	50.4	38.8	379.2	39.4	29.4	7.86
1993-94	546.4	53.3	38.0	410.5	43.1	28.0	6.73
1994-95	584.8	55.1	42.0	437.5	44.8	31.4	7.96
1995-96	624.7	56.9	46.9	466.1	48.3	35.3	7.33
1996-97	640.7	61.7	45.0	473.4	54.2	33.0	6.63
1997-98	638.5	63.7	40.9	463.8	57.3	31.0	6.80

[1] After adjusting for non-interest-bearing liabilities. Definition of fixed debt may vary slightly from year to year to accommodate changes in the debt structure.

[2] Outstanding market debt equals unmatured debt minus bonds for the Canada Pension Plan.

Sources: *Public Accounts of Canada, Bank of Canada Review*, Department of Finance estimates

Reference Table II

Government of Canada outstanding market debt[1]

	Payable in Canadian dollars				Payable in foreign currencies						
	Treasury bills	Marketable bonds	Retail debt	Total	Marketable bonds	Canada Bills	Canada Notes	Standby drawings	Terms loans	Total	Total market
	(millions of Canadian dollars)										
Fiscal years ending March 31											
1977-78	11,295	21,645	18,036	50,477	181	0	0	850	0	1,031	51,580
1978-79	13,535	26,988	19,443	59,474	3,319	0	0	2,782	1,115	7,216	66,544
1979-80	16,325	33,387	18,182	67,407	3,312	0	0	359	1,030	4,701	72,908
1980-81	21,770	40,976	15,966	78,531	3,236	0	0	355	1,046	4,637	83,002
1981-82	19,375	43,605	25,108	87,912	3,867	0	0	0	550	4,417	93,013
1982-83	29,125	48,473	32,753	110,182	4,872	0	0	0	362	5,234	116,391
1983-84	41,700	56,976	38,403	136,914	4,306	0	0	510	398	5,214	142,712
1984-85	52,300	69,354	42,167	163,723	4,972	0	0	1,909	1,172	8,053	172,514
1985-86	61,950	81,163	44,607	187,624	9,331	0	0	2,233	2,247	13,811	200,784
1986-87	76,950	94,520	43,854	215,230	9,120	1,045	0	0	2,047	12,212	226,815
1987-88	81,050	103,899	52,558	237,507	8,438	1,045	0	0	2,257	11,740	248,317
1988-89	102,700	115,748	47,048	265,496	6,672	1,131	0	0	934	8,737	273,296
1989-90	118,550	127,681	40,207	286,439	4,364	1,446	0	0	0	5,810	291,490
1990-91	139,150	143,601	33,782	316,532	3,555	1,008	0	0	0	4,563	320,411
1991-92	152,300	158,059	35,031	345,389	3,535	0	0	0	0	3,535	348,384
1992-93	162,050	178,436	33,884	374,370	2,926	2,552	0	0	0	5,478	379,236
1993-94	166,000	203,373	30,866	400,238	5,019	5,649	0	0	0	10,668	410,478
1994-95	164,450	225,513	30,756	420,719	7,875	9,046	0	0	0	16,921	437,510
1995-96	166,100	252,411	30,801	449,313	9,514	6,986	310	0	0	16,810	466,069
1996-97	135,400	282,059	32,911	450,370	12,460	8,436	2,121	0	0	23,017	473,387
1997-98	112,300	294,028	30,302	436,630	16,101	9,356	1,624	0	0	27,081	463,835

[1] Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from public accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

Source: *Bank of Canada Review,* Department of Finance

Reference Table III

Average weekly domestic market trading in Government of Canada securities, April 1997 to March 1998

		Marketable bonds					
	Treasury bills	3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	Total
	(millions of dollars)						
April 1997	64,372	44,967	40,024	15,970	201	101,163	165,535
May 1997	53,979	40,392	38,903	14,920	189	94,403	148,382
June 1997	53,875	50,664	45,065	13,337	610	109,675	163,550
July 1997	49,248	41,173	41,323	10,511	321	93,328	142,576
August 1997	45,685	53,507	48,639	14,410	309	116,865	162,550
September 1997	48,600	41,433	40,543	13,101	396	95,473	144,073
October 1997	44,736	39,232	45,678	16,343	522	101,775	146,511
November 1997	47,447	32,224	40,809	15,569	222	88,824	136,271
December 1997	41,680	40,959	38,501	11,993	379	91,832	133,512
January 1998	45,814	41,336	41,436	15,455	187	98,414	144,228
February 1998	45,061	38,716	42,546	15,047	121	96,430	141,491
March 1998	35,865	47,129	37,914	15,447	359	100,850	136,715

Source: *Bank of Canada Review*

Reference Table IV

Distribution of domestic holdings of Government of Canada securities

PART A – Treasury bills, Canada Billls, bonds[1] and Canada Savings Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
				(millions of dollars)					
1976	17,944	395	8,242	8,666	716	1,436	2,261	730	40,390
1977	20,302	306	10,268	9,601	1,048	2,271	3,104	1014	47,914
1978	22,736	418	12,001	9,896	1,537	3,738	4,006	1,721	56,053
1979	23,140	372	13,656	10,156	1,684	6,716	4,108	2,878	62,710
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,125	520	17,100	10,003	2,452	10,569	5,342	4,194	83,305
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,529	17,816	9,984	5,321	126,424
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,332	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,551
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,711	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207,250
1988	86,539	8,634	20,606	21,115	7,527	42,460	19,028	17,186	223,095
1989	84,650	11,402	21,133	19,804	9,853	46,037	23,850	17,840	234,569
1990	81,554	11,933	20,325	23,224	10,413	52,984	26,051	19,543	246,027
1991	75,304	11,655	22,370	35,792	12,069	55,846	33,054	21,015	267,105
1992	73,163	13,647	22,607	44,555	12,440	60,042	39,396	20,223	286,073
1993	63,843	10,359	23,498	60,242	11,073	69,930	45,077	16,397	300,419
1994	52,704	12,039	24,902	70,063	10,051	78,563	52,599	25,449	326,370
1995	47,737	11,974	23,590	76,560	10,900	87,284	58,955	24,742	341,742
1996	47,532	10,539	25,556	74,789	10,521	88,005	83,212	22,758	362,912
1997	36,037	12,028	27,198	67,715	7,359	95,875	80,028	24,534	350,774

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART B – Treasury bills, Canada Bills, bonds[1] and Canada Savings Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total*
					(per cent)				
1976	44.43	0.98	20.41	21.46	1.77	3.56	5.60	1.81	100.00
1977	42.37	0.64	21.43	20.04	2.19	4.74	6.48	2.12	100.00
1978	40.56	0.75	21.41	17.65	2.74	6.67	7.15	3.07	100.00
1979	36.90	0.59	21.78	16.20	2.69	10.71	6.55	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.76	0.62	20.53	12.01	2.94	12.69	6.41	5.03	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.79	4.35	13.34	11.95	4.37	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.39	4.15	9.75	7.73	3.09	18.76	9.43	6.72	100.00
1988	38.79	3.87	9.24	9.46	3.37	19.03	8.53	7.70	100.00
1989	36.09	4.86	9.01	8.44	4.20	19.63	10.17	7.61	100.00
1990	33.15	4.85	8.26	9.44	4.23	21.54	10.59	7.94	100.00
1991	28.19	4.36	8.37	13.40	4.52	20.91	12.37	7.87	100.00
1992	25.57	4.77	7.90	15.57	4.35	20.99	13.77	7.07	100.00
1993	21.25	3.45	7.82	20.05	3.69	23.28	15.00	5.46	100.00
1994	16.15	3.69	7.63	21.47	3.08	24.07	16.12	7.80	100.00
1995	13.97	3.50	6.90	22.40	3.19	25.54	17.25	7.24	100.00
1996	13.10	2.90	7.04	20.61	2.90	24.25	22.93	6.27	100.00
1997	10.27	3.43	7.75	19.30	2.10	27.33	22.81	6.99	100.00

* May not add due to rounding.

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART C – Treasury bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
	(millions of dollars)								
1976	186	125	1,964	4,219	52	44	500	193	7,283
1977	413	121	2,461	4,949	143	98	1,016	311	9,512
1978	570	213	3,567	5,517	193	261	1,545	519	12,385
1979	797	163	4,345	6,690	65	245	1,540	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,158	2,587	5,376	1,286	36,793
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,712	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,246
1988	20,186	7,414	9,945	15,224	5,624	7,648	9,133	7,726	82,900
1989	32,639	9,668	11,124	16,410	8,115	7,664	12,408	9,251	107,279
1990	37,730	10,816	10,574	16,841	8,929	11,737	12,998	9,388	119,013
1991	32,321	10,483	13,093	24,382	9,080	10,386	17,636	10,417	127,798
1992	34,864	11,215	14,634	27,989	9,661	11,639	19,907	8,726	138,635
1993	29,561	9,657	16,876	29,901	9,097	17,050	22,336	5,151	139,629
1994	17,358	8,499	18,973	30,415	6,898	14,402	22,021	10,713	129,279
1995	14,306	9,204	18,298	30,865	7,645	15,422	25,183	10,078	131,001
1996	13,034	8,289	17,593	23,470	5,366	11,385	32,657	4,859	116,653
1997	39	8,535	14,233	19,448	3,261	9,557	33,402	4,388	92,863

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART D – Treasury bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total*
					(per cent)				
1976	2.55	1.72	26.97	57.93	0.71	0.60	6.87	2.65	100.00
1977	4.34	1.27	25.87	52.03	1.50	1.03	10.68	3.27	100.00
1978	4.60	1.72	28.80	44.55	1.56	2.11	12.47	4.19	100.00
1979	5.43	1.11	29.58	45.55	0.44	1.67	10.48	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.24	13.99	7.05	35.00	8.58	7.03	14.61	3.50	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.58	10.44	13.98	16.60	5.38	6.94	13.85	7.22	100.00
1988	24.35	8.94	12.00	18.36	6.78	9.23	11.02	9.32	100.00
1989	30.42	9.01	10.37	15.30	7.56	7.14	11.57	8.62	100.00
1990	31.70	9.09	8.88	14.15	7.50	9.86	10.92	7.89	100.00
1991	25.29	8.20	10.25	19.08	7.10	8.13	13.80	8.15	100.00
1992	25.15	8.09	10.56	20.19	6.97	8.40	14.36	6.29	100.00
1993	21.17	6.92	12.09	21.41	6.52	12.21	16.00	3.69	100.00
1994	13.43	6.57	14.68	23.53	5.34	11.14	17.03	8.29	100.00
1995	10.92	7.03	13.97	23.56	5.84	11.77	19.22	7.69	100.00
1996	11.17	7.11	15.08	20.12	4.60	9.76	27.99	4.17	100.00
1997	0.04	9.19	15.33	20.94	3.51	10.29	35.97	4.73	100.00

* May not add due to rounding.

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART E – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
				(millions of dollars)					
1976	1,274	270	6,278	4,447	664	1,392	1,761	537	16,623
1977	1,696	185	7,807	4,652	905	2,173	2,088	703	20,209
1978	1,931	205	8,434	4,379	1,344	3,477	2,461	1,202	23,433
1979	3,721	209	9,311	3,466	1,619	6,471	2,568	2,035	29,400
1980	4,890	267	10,541	2,502	2,152	8,814	3,130	2,736	35,032
1981	6,759	151	11,669	1,406	2,109	10,009	3,155	3,112	38,370
1982	7,374	337	12,945	1,199	1,931	11,907	4,169	3,455	43,317
1983	6,813	356	14,264	2,228	2,371	15,229	4,608	4,035	49,904
1984	9,906	508	13,669	2,167	2,095	20,163	5,434	4,668	58,610
1985	11,483	870	11,683	2,569	2,055	27,144	6,957	5,970	68,731
1986	9,827	1,384	10,407	2,618	2,568	31,295	8,250	7,877	74,226
1987	10,959	1,359	10,519	4,514	2,675	34,064	9,958	8,916	82,964
1988	11,476	1,220	10,661	5,891	1,903	34,812	9,895	9,460	85,318
1989	8,313	1,734	10,009	3,394	1,738	38,373	11,442	8,589	83,592
1990	8,306	1,117	9,751	6,383	1,484	41,247	13,053	10,155	91,496
1991	5,676	1,172	9,277	11,410	2,989	45,460	15,418	10,598	102,000
1992	2,417	2,432	7,973	16,566	2,779	48,403	19,489	11,497	111,556
1993	1,659	702	6,622	30,341	1,976	52,880	22,741	11,246	128,167
1994	1,834	3,540	5,929	39,648	3,153	64,161	30,578	14,736	163,579
1995	1,072	2,770	5,292	45,695	3,255	71,862	33,772	14,664	178,382
1996	108	2,250	7,963	51,319	5,155	76,620	50,555	17,899	211,869
1997	4,710	3,493	12,965	48,267	4,098	86,318	46,626	20,146	226,623

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART F – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total*
					(per cent)				
1976	7.66	1.62	37.77	26.75	3.99	8.37	10.59	3.23	100.00
1977	8.39	0.92	38.63	23.02	4.48	10.75	10.33	3.48	100.00
1978	8.24	0.87	35.99	18.69	5.74	14.84	10.50	5.13	100.00
1979	12.66	0.71	31.67	11.79	5.51	22.01	8.73	6.92	100.00
1980	13.96	0.76	30.09	7.14	6.14	25.16	8.93	7.81	100.00
1981	17.62	0.39	30.41	3.66	5.50	26.09	8.22	8.11	100.00
1982	17.02	0.78	29.88	2.77	4.46	27.49	9.62	7.98	100.00
1983	13.65	0.71	28.58	4.46	4.75	30.52	9.23	8.09	100.00
1984	16.90	0.87	23.32	3.70	3.57	34.40	9.27	7.96	100.00
1985	16.71	1.27	17.00	3.74	2.99	39.49	10.12	8.69	100.00
1986	13.24	1.86	14.02	3.53	3.46	42.16	11.11	10.61	100.00
1987	13.21	1.64	12.68	5.44	3.22	41.06	12.00	10.75	100.00
1988	13.45	1.43	12.50	6.90	2.23	40.80	11.60	11.09	100.00
1989	9.94	2.07	11.97	4.06	2.08	45.91	13.69	10.27	100.00
1990	9.08	1.22	10.66	6.98	1.62	45.08	14.27	11.10	100.00
1991	5.56	1.15	9.10	11.19	2.93	44.57	15.12	10.39	100.00
1992	2.17	2.18	7.15	14.85	2.49	43.39	17.47	10.31	100.00
1993	1.29	0.55	5.17	23.67	1.54	41.26	17.74	8.77	100.00
1994	1.12	2.16	3.62	24.24	1.93	39.22	18.69	9.01	100.00
1995	0.60	1.55	2.97	25.62	1.82	40.29	18.93	8.22	100.00
1996	0.05	1.06	3.76	24.22	2.43	36.16	23.86	8.45	100.00
1997	2.08	1.54	5.72	21.30	1.81	38.09	20.57	8.89	100.00

Note: Because of timing and valuation differences, the *National Balance Sheet* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report is on a par value basis – that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

[1] Includes bonds denominated in foreign currencies.

[2] Includes Quebec savings banks, credit unions and caisses populaires, trust companies, and mortgage loan companies.

[3] Includes investment dealers, mutual funds, fire and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

[4] Includes federal government holdings of its own debt, as well as provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

* May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts*

Reference Table V

Non-resident holdings of Government of Canada debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada bills	Total	Total as per cent of total market debt
		(billions of Canadian dollars)		
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	9.4
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.7
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.1
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.4
1987	30.3	4.7	35.0	15.4
1988	33.0	9.3	42.3	17.0
1989	41.3	15.7	57.0	20.8
1990	49.9	13.3	63.2	21.6
1991	57.6	16.1	73.7	23.0
1992	63.6	23.0	86.6	24.8
1993	80.9	24.8	105.7	27.9
1994	79.3	34.0	113.3	27.6
1995	73.6	39.2	112.8	25.8
1996	84.1	36.7	120.8	25.9
1997	91.3	29.1	120.4	25.4
1998	92.3	22.1	114.4	24.7

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities*

Reference Table VI

Fiscal 1997-98 Treasury bill program

	Maturing					New issues					Net increment			Average tender yields			
Date	CMB	3 mo	6 mo	12 mo	Total	CMB	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S	CMB	3 mo	6 mo	12 mo
						(millions of dollars)								(per cent)			
3-Apr-97	3,000	2,300	0	2,700	8,000	0	2,900	1,300	1,200	5,400	-2,600	-2,600	132,800		3.28	3.63	4.22
10-Apr-97	0	2,500	2,900	0	5,400	0	2,400	1,300	1,100	4,800	-600	-3,200	132,200		3.06	2.48	4.36
17-Apr-97	0	2,400	0	2,500	4,900	0	2,400	1,200	1,200	4,800	-100	-3,300	132,100		3.20	3.30	4.33
24-Apr-97	0	2,400	2,800	0	5,200	0	2,400	1,300	1,100	4,800	-400	-3,700	131,700		3.20	3.63	4.23
1-May-97	1,500	2,600	0	2,500	6,600	0	2,300	1,200	1,200	4,700	-1,900	-5,600	129,800		3.14	3.59	4.23
8-May-97	0	2,600	2,800	0	5,400	0	2,300	1,200	1,000	4,500	-900	-6,500	128,900		3.00	3.36	3.96
15-May-97	0	2,600	0	2,500	5,100	0	2,200	1,000	1,100	4,300	-800	-7,200	128,100		3.06	3.43	3.97
22-May-97	0	2,700	2,600	0	5,300	0	2,000	1,100	1,000	4,100	-1,200	-8,500	126,900		3.11	3.46	3.89
29-May-97	0	3,000	0	2,500	5,500	0	2,200	1,100	1,100	4,400	-1,100	-9,600	125,800		3.01	3.39	3.87
5-Jun-97	0	3,200	2,800	0	5,800	0	2,200	1,200	1,000	4,400	-1,400	-11,000	124,400		2.98	3.31	3.79
12-Jun-97	0	3,300	0	2,300	5,600	0	2,200	1,100	1,100	4,400	-1,200	-12,200	123,200		2.90	3.33	3.81
19-Jun-97	0	3,400	2,500	0	5,900	0	2,200	1,100	1,000	4,300	-1,600	-13,800	121,600		2.86	3.19	3.60
24-Jun-97	0	3,500	0	2,200	5,700	0	2,300	1,100	1,100	4,500	-1,200	-15,000	120,400		2.86	3.18	3.67
3-Jul-97	0	2,900	2,400	0	5,300	3,000	2,400	1,200	1,100	7,700	2,400	-12,600	122,800	3.19	3.17	3.52	4.01
10-Jul-97	0	2,400	0	2,200	4,600	0	2,400	1,100	1,100	4,600	0	-12,600	122,800		3.06	3.40	3.90
17-Jul-97	0	2,400	2,600	0	5,000	0	2,400	1,200	1,000	4,600	-400	-13,000	122,400		3.21	3.55	4.16
24-Jul-97	0	2,400	0	2,400	4,800	0	2,500	1,200	1,100	4,800	0	-13,000	122,400		3.38	3.77	4.26
31-Jul-97	0	2,300	2,600	0	4,900	0	2,400	1,200	1,000	4,600	-300	-13,300	122,100		3.32	3.73	4.26
7-Aug-97	3,000	2,300	0	2,600	7,900	0	2,300	1,100	1,000	4,400	-3,500	-16,800	118,600		3.32	3.71	4.19
14-Aug-97	0	2,200	2,800	0	4,800	500	2,200	1,100	1,000	4,800	0	-16,800	118,600	3.81	3.14	3.69	3.89
21-Aug-97	0	2,000	0	2,600	4,600	0	2,100	1,100	1,000	4,200	-400	-17,200	118,200		2.99	3.57	4.05
28-Aug-97	0	2,200	2,700	0	4,900	0	2,100	1,100	1,000	4,200	-700	-17,900	117,500		3.13	3.71	4.21
4-Sep-97	0	2,200	0	2,600	4,800	0	2,100	1,100	1,000	4,200	-800	-18,500	116,900		3.08	3.65	4.13
11-Sep-97	0	2,200	3,000	0	5,200	0	2,100	1,800	1,000	4,900	-300	-18,800	116,600		2.99	3.59	4.18
18-Sep-97	0	2,200	0	2,400	4,600	0	3,700	2,000	1,800	7,500	2,900	-15,900	119,500		2.97	3.56	4.17
25-Sep-97	0	2,300	2,900	0	5,200	1,000	0	0	0	1,000	-4,200	-20,100	115,300	3.04	–	–	–
2-Oct-97	1,000	2,400	0	2,200	5,600	0	4,300	2,100	1,900	8,300	2,700	-17,400	118,000		3.10	3.62	4.17
9-Oct-97	0	2,400	2,500	0	4,900	3,000	0	0	0	3,000	-1,900	-19,300	116,100	3.25	–	–	–
16-Oct-97	0	2,400	0	2,200	4,600	0	4,100	2,000	1,900	8,000	3,400	-15,900	119,500		3.30	3.69	4.20
23-Oct-97	0	2,500	2,500	0	5,000	2,000	0	0	0	2,000	-3,000	-18,900	-116,500	3.51	–	–	–
30-Oct-97	0	2,400	0	2,200	4,600	0	4,100	2,000	1,900	8,000	3,400	-15,500	119,900		3.63	3.00	4.20
8-Nov-97	0	2,300	2,200	0	4,500	0	0	0	0	0	-4,500	-20,000	115,400		–	–	–
13-Nov-97	2,000	2,200	0	2,200	6,400	0	4,000	2,100	1,900	8,000	1,600	-18,400	117,000		3.63	3.93	4.25
20-Nov-97	0	2,100	2,200	0	4,300	0	0	0	0	0	-4,300	-22,700	112,700		–	–	–
27-Nov-97	0	2,100	0	2,200	4,300	0	4,000	2,100	1,900	8,000	3,700	-19,000	116,400		3.57	3.93	4.25
4-Dec-97	3,000	2,100	2,300	0	7,400	0	0	0	0	0	-7,400	-26,400	109,000		–	–	–
11-Dec-97	0	2,100	0	2,200	4,300	0	3,800	2,000	1,800	7,600	3,300	-23,100	112,300		3.80	4.25	4.60

Reference Table VI *(cont'd)*

Fiscal 1997-98 Treasury bill program

	Maturing					New issues					Net increment			Average tender yields			
Date	CMB	3 mo	6 mo	12 mo	Total	CMB	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S	CMB	3 mo	6 mo	12 mo
	(millions of dollars)													(per cent)			
18-Dec-97	0	0	2,200	0	2,200	0	0	0	0	0	-2,200	-25,300	110,100		–	–	–
23-Dec-97	0	3,700	0	2,100	5,800	0	3,400	1,800	1,600	6,800	1,000	-24,300	111,100		4.46	4.88	5.20
30-Dec-97	0	0	2,300	0	2,300	0	0	0	0	0	-2,300	-26,600	108,800		–	–	–
8-Jan-98	0	4,300	0	2,100	6,400	0	4,000	2,100	1,900	8,000	1,600	-25,000	110,400		4.17	4.69	5.01
15-Jan-98	0	0	2,400	0	2,400	0	0	0	0	0	-2,400	-27,300	108,000		–	–	–
22-Jan-98	0	4,100	0	2,200	6,300	0	4,000	2,100	1,900	8,000	1,700	-25,700	109,700		4.18	4.60	4.91
29-Jan-98	0	0	2,300	0	2,300	0	0	0	0	0	-2,300	-28,000	107,400		–	–	–
5-Feb-98	0	4,100	0	2,300	6,400	0	4,200	2,200	1,900	8,300	1,900	-26,100	109,300		4.52	4.94	5.07
12-Feb-98	0	0	2,200	0	2,200	0	0	0	0	0	-2,200	-28,300	107,100		–	–	–
19-Feb-98	0	4,000	0	2,200	6,200	0	4,000	2,100	1,900	8,000	1,800	-26,500	108,900		4.57	4.89	5.09
26-Feb-98	0	0	2,200	0	2,200	2,500	0	0	0	2,500	300	-26,200	109,200	4.56	–	–	–
5-Mar-98	0	4,000	0	2,300	6,300	0	4,200	2,100	1,900	8,200	1,900	-24,300	111,100		4.65	4.08	5.10
12-Mar-98	0	0	1,800	0	1,800	2,500	0	0	0	2,500	700	-23,600	111,800	4.60	–	–	–
19-Mar-98	0	3,800	4,100	2,300	10,200	2,500	4,200	2,100	1,900	10,700	500	-23,100	112,300	4.67	4.58	4.75	4.96
26-Mar-98	0	0	0	0	0	0	0	0	0	0	0	-23,100	112,300		–	–	–
Total	**13,500**	**119,500**	**66,600**	**60,700**	**260,300**	**17,000**	**111,000**	**57,200**	**51,600**	**236,900**	**-23,500**	**–**	**112,300**		**–**	**–**	**–**

Source: Bank of Canada.

Reference Table VII

Fiscal 1997-98 Canadian dollar marketable bond program

Offering date	Delivery date	Maturity date	Maturing	Gross	Net
			(millions of dollars)		
Fixed-coupon bonds					
1997	**1997**				
April 23	May 1	June 1, 2027		1,300	1,300
May 7	May 15	June 1, 2007	876	2,400	1,524
May 28	June 2	September 1, 2002		2,600	2,600
June 11	June 16	September 15, 1999		3,500	3,500
—	July 2*	—	4,200	0	-4,200
July 23	August 1	June 1, 2027		1,300	1,300
August 6	August 15	June 1, 2008		2,300	2,300
August 27	September 2	September 1, 2002		2,500	2,500
September 10	September 15	September 15, 1999	5,400	3,500	-1,900
—	October 1*	—	2,775	0	-2,775
October 29	November 3	June1, 2027		1,200	1,200
November 5	November 17	June 1, 2008		2,300	2,300
November 26	December 1	September 1, 2002		2,400	2,400
December 10	December 15	March 15, 2000		3,500	3,500
1998	**1998**				
January 28	February 2	June 1, 2029	6,600	1,200	-5,400
February 11	February 16	June 1, 2008		2,300	2,300
February 18	March 2	September 1, 2003		2,400	2,400
March 11	March 16	March 15, 2000	8,122	3,500	-4,622
Real Return Bonds					
1997	**1997**				
June 4	June 9	December 1, 2026		500	500
September 3	September 8	December 1, 2026		400	400
December 3	December 8	December 1, 2026		400	400
1998	**1998**				
March 4	March 9	December 1, 2026		400	400
Total fiscal year 1997-98			**27,973**	**39,900**	**11,927**

* Maturing date

Source: Bank of Canada

Reference Table VIII

Outstanding Government of Canada Canadian dollar marketable bonds as of March 31, 1998

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	(millions of dollars)	(per cent)		(millions of dollars)	(per cent)
Fixed-coupon					
01-Sep-1998	6,800.0	6.50	01-Feb-2002	213.0	8.75
15-Sep-1998	6,000.0	6.25	15-Mar-2002	350.0	15.50
01-Oct-1998	3,100.0	9.50	01-Apr-2002	5,450.0	8.50
01-Nov-1998	5,100.0	8.00	01-May-2002	1,850.0	10.00
01-Dec-1998	2,275.0	10.25	01-Sep-2002	10,200.0	5.50
01-Mar-1999	6,700.0	5.75	15-Dec-2002	1,625.0	11.25
15-Mar-1999	6,000.0	4.00	01-Feb-2003	2,700.0	11.75
01-Aug-1999	5,600.0	6.50	01-Jun-2003	6,900.0	7.25
01-Sep-1999	8,500.0	7.75	01-Sep-2003	2,400.0	5.25
15-Sep-1999	7,000.0	4.75	01-Oct-2003	670.5	9.50
15-Oct-1999	527.5	9.00	01-Dec-2003	8,800.0	7.50
01-Dec-1999	2,825.0	9.25	01-Feb-2004	2,200.0	10.25
01-Dec-1999	400.0	13.50	01-Jun-2004	7,900.0	6.50
01-Feb-2000	5,500.0	5.50	01-Jun-2004	550.0	13.50
01-Mar-2000	6,500.0	8.50	01-Oct-2004	875.0	10.50
15-Mar-2000	7,000.0	5.00	01-Dec-2004	7,700.0	9.00
15-Mar-2000	1,050.0	13.75	01-Mar-2005	1,775.0	12.00
01-May-2000	1,575.0	9.75	01-Sep-2005	1,375.0	12.25
01-Jul-2000	2,900.0	10.50	01-Dec-2005	8,000.0	8.75
01-Jul-2000	175.0	15.00	01-Mar-2006	975.0	12.50
01-Sep-2000	7,600.0	7.50	01-Oct-2006	1,025.0	14.00
01-Sep-2000	1,200.0	11.50	01-Dec-2006	9,100.0	7.00
15-Dec-2000	500.0	9.75	01-Mar-2007	325.0	13.75
01-Feb-2001	425.0	15.75	01-Jun-2007	9,500.0	7.25
01-Mar-2001	9,400.0	7.50	01-Oct-2007	700.0	13.00
01-Mar-2001	3,175.0	10.50	01-Mar-2008	750.0	12.75
01-May-2001	1,325.0	13.00	01-Jun-2008	6,900.0	6.00
01-Jun-2001	3,550.0	9.75	01-Jun-2008	3,450.0	10.00
01-Sep-2001	10,600.0	7.00	01-Oct-2008	725.0	11.75
01-Oct-2001	1,232.8	9.50	01-Mar-2009	400.0	11.50
01-Dec-2001	3,850.0	9.75			

Reference Table VIII *(cont'd)*

Outstanding Government of Canada Canadian dollar marketable bonds as at March 31, 1998

Maturity date	Amount	Coupon rate
	(millions of dollars)	(per cent)
Fixed-coupon		
01-Jun-2009	925.0	11.00
01-Oct-2009	1,300.0	10.75
01-Mar-2010	325.0	9.75
01-Jun-2010	2,975.0	9.50
01-Oct-2010	325.0	8.75
01-Mar-2011	1,975.0	9.00
01-Jun-2011	750.0	8.50
15-Mar-2014	3,150.0	10.25
15-Jun-2015	2,350.0	11.25
15-Mar-2021	1,800.0	10.50
01-Jun-2021	4,650.0	9.75
01-Jun-2022	2,550.0	9.25
01-Jun-2023	8,200.0	8.00
01-Jun-2025	8,900.0	9.00
01-Jun-2027	9,600.0	8.00
01-Jun-2029	1,200.0	5.75
Total	**284.7**	

Maturity date	Amount	Coupon rate
	(millions of dollars)	(per cent)
Real Return Bonds		
01-Dec-2021	5,175.0	4.25
01-Dec-2026	4,050.0	4.25
Total[1]	**9,225.0**	

[1] Real Return Bond figures show gross issue amount only – the CPI adjustment is not shown here.

Source: Bank of Canada

Reference Table IX

Government of Canada swaps outstanding as at March 31, 1998

Domestic interest rate swaps			Cross-currency swaps	
Maturity date	Coupon[1]	Notional amount	Maturity date	Notional amount
	(per cent)	(millions of dollars)		(millions of U.S. dollars)
05-Sep-98	6.50	100	01-Mar-00	286
01-Oct-98	9.50	150	04-Sep-01	1,000
01-Dec-98	10.25	100	01-Sep-02	1,250
01-Mar-99	5.75	1,000	15-Dec-02	600
01-Sep-99	7.75	100	01-Mar-05	500
01-Mar-00	8.50	400	01-Dec-05	500
01-Jun-01	9.75	250	01-Jun-07	750
01-Feb-04	10.25	50	01-Mar-08	200
			01-Jun-08	250
Total		**2,150**	**Total**	**5,336**

[1] Refers to the coupon of the underlying bond that was swapped.

Source: Bank of Canada

Reference Table X

Canada Savings Bonds, fiscal 1982-83 to fiscal 1997-98

Fiscal year	Gross sales during campaign[1]	Net sales during campaign[1]	Outstanding at fiscal year end[2]
		(millions of dollars)	
1982-83	11,229	9,567	32,753
1983-84	11,584	8,761	38,403
1984-85	12,743	9,768	42,167
1985-86	15,107	10,157	44,607
1986-87	9,191	5,177	43,854
1987-88	17,450	14,913	52,558
1988-89	14,962	6,454	47,048
1989-90	9,338	3,121	40,207
1990-91	6,720	1,660	33,781
1991-92	9,588	4,733	35,031
1992-93	9,235	3,275	33,884
1993-94	5,364	842	30,866
1994-95	7,506	5,709	30,756
1995-96	4,612	3,352	30,801
1996-97	5,710	4,730	32,911
1997-98	4,885	701	30,302

[1] The figures shown are for the CSB campaign period, not the entire fiscal period; net sales are gross sales less redemptions during the period.

[2] Figures in accordance with Bank of Canada reports, which may vary slightly from public accounts categories due to differences in classification methods.

Sources: Department of Finance, *Bank of Canada Review*

Reference Table XI

Crown corporation borrowings as at March 31

Borrowings from the market

Corporation	1990	1991	1992	1993	1994	1995	1996	1997	1998
				(millions of dollars)					
Export Development Corporation	5,802	5,685	6,220	6,983	7,793	7,515	7,673	7,820	10,077
Canadian Wheat Board	4,354	6,449	7,323	6,966	7,283	7,321	6,377	6,474	6,698
Business Development Bank of Canada	2,299	2,271	2,249	2,352	2,602	2,723	3,045	3,371	3,839
Farm Credit Corporation	1,216	1,128	813	797	863	990	1,582	1,926	3,026
CN*	1,716	1,861	1,803	1,905	2,249	2,331	–	–	–
Canada Mortgage and Housing Corporation	–	–	96	152	1,573	3,630	5,906	7,866	9,934
Canada Development Investment Corporation	566	612	713	594	473	–	–	–	–
Petro-Canada Ltd.	2,450	1,656	980	455	501	504	490	432	443
Petro-Canada*	–	718	–	–	–	–	–	–	–
Canada Ports Corporation	–	–	200	188	–	–	–	–	–
Other	42	98	96	97	239	235	297	226	262
Total	**18,445**	**20,478**	**20,493**	**20,489**	**23,576**	**25,249**	**25,370**	**28,115**	**34,279**

* These corporations are no longer Crown corporations.

Source: *Public Accounts of Canada*.

Borrowings from the Consolidated Revenue Fund

Corporation	1990	1991	1992	1993	1994	1995	1996	1997	1998
				(millions of dollars)					
Canada Mortgage and Housing Corporation	8,678	8,484	8,419	8,181	8,075	7,835	7,263	6,938	6,708
Canada Deposit Insurance Corporation	1,695	1,225	1,785	3,085	3,151	2,160	1,627	855	395
Farm Credit Corporation	3,253	2,432	2,491	2,420	2,488	2,524	2,310	2,507	1,877
Other	1,218	934	975	819	415	307	233	204	179
Total	**14,844**	**13,075**	**13,670**	**14,505**	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**

Note: Figures do not include “allowance for valuation”.

Source: Public Works and Government Services Canada data

Debt Management Report

1998-99

Canada

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Foreword by the Minister of Finance

I am very pleased to table for the first time before Parliament the Debt Management Report (DMR) of the Government of Canada for fiscal year 1998-99.

The DMR provides a comprehensive accounting of federal debt operations for 1998-99, including the composition of the debt, its distribution, and the mechanisms and activities through which it is prudently managed in the interests of Canadians. Although interest costs on the federal debt have fallen in recent years, they still constitute the largest spending program of the federal government. Therefore, it is vitally important that Canadians receive timely and transparent reports on the outcomes of debt management operations.

To that end, and to demonstrate its commitment to strengthening the accountability and reporting framework of federal debt management, the Government recently introduced several amendments to the debt management sections of the *Financial Administration Act*. One of these changes mandates that the DMR be tabled in both Houses of Parliament shortly after the tabling of the Public Accounts of Canada – the Government's financial statements.

In this respect, through the efforts of all Canadians, the Government has presided over a significant and historic turnaround in federal finances. Indeed, as detailed in the Public Accounts of Canada, the federal government posted a surplus of $3.5 billion in 1997-98. This was followed up with a surplus of $2.9 billion in 1998-99, marking the first back-to-back surpluses in nearly half a century.

What these surpluses mean for Canadians is that the absolute stock of net public debt declined in both 1997-98 and 1998-99. Further, the share of Canadians' tax dollars devoted to servicing the debt also declined – in 1995, 36 cents of every dollar of revenue collected by the Government was used to pay interest costs on the debt; in 1998-99 this was down to 27 cents. Moreover, with a reduced revenue share directed to debt servicing, Canadians can expect continued tax reductions and greater investments in priority areas such as education, the environment, health care or child poverty.

Canadians can expect the Government to continue to manage its debt prudently to provide stable, low-cost financing for the Government. Indeed, as explained in the DMR, the Government has recently undertaken a series of initiatives to achieve these objectives and to modernize the federal government's debt and risk management capabilities.

I am confident that the information provided herein will enable all Canadians – taxpayers and Parliamentarians alike – to gain a better understanding and heightened appreciation of our shared fiscal triumphs in the past and will provide certainty and confidence that, together, we will overcome those fiscal challenges that face us now.

The Honourable Paul Martin, P.C., M.P.
Minister of Finance
Ottawa, November 30, 1999

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Highlights of 1998-99

The federal government recorded its second consecutive budgetary surplus in 1998-99, the first back-to-back surpluses since 1951-52.

- The federal government recorded its second consecutive budgetary surplus in 1998-99, the first back-to-back surpluses since 1951-52. In 1998-99, there was a budgetary surplus of $2.9 billion, while in 1997-98 the federal government recorded a surplus of $3.5 billion.
- As of March 31, 1999, the federal government's market debt totalled $460.4 billion (see Table 1). During 1998-99, the federal government retired $6.9 billion of its market debt.
  - Domestic debt declined by $16.3 billion in 1998-99, largely through a decline in the Treasury bill stock, while Canada Pension Plan bonds rose by $0.6 billion.
  - Foreign debt increased by $8.8 billion. The increase in foreign debt was to replenish foreign reserves used during the year to maintain order in the Canadian dollar market and to bring the level of Canada's international reserves more in line with comparable sovereigns. Canada's foreign-currency debt represents less than 8 per cent of its total outstanding market debt.

Table 1
1998-99 market debt program

	March 31, 1998	Net new issuance	March 31, 1999
		(billions of C$)	
Domestic debt	436.7	-16.3	420.4
Foreign debt	27.2	8.8	36.0
Canada Pension Plan bonds	3.5	0.6	4.1
Total market debt	**467.3**	**-6.9**	**460.4**

Numbers may not add due to rounding.

The prudent debt structure was reinforced to achieve greater stability of debt servicing costs.

The Government has recently taken a number of actions to maintain liquidity and market integrity.

- The federal government's prudent debt structure was reinforced by increasing the fixed-rate share of the Government's gross debt (the portion that does not mature or get repriced within a year) to two thirds at October 31, 1998. A prudent debt structure is essential to protect the Government's fiscal position from unexpected increases in interest rates and to moderate refinancing risk.
- Continuing its efforts to improve liquidity, transparency and efficiency in the market for Government of Canada securities, the Government took a number of further steps in 1998-99, including:
  - launching a pilot bond buyback program to help maintain primary bond market liquidity;
  - implementing new auction rules for Government of Canada securities to enhance the integrity of the primary market and collaborating in the development of the Investment Dealers Association of Canada (IDA) Code of Conduct to reinforce integrity of the secondary market; and
  - modernizing the federal government's debt and risk management capabilities through the amendment of the *Financial Administration Act* (FAA).

Debt Management Environment

Fiscal Developments in 1998-99

After recording uninterrupted deficits from 1970-71 to 1996-97, the federal government posted a budgetary surplus of $3.5 billion in 1997-98. This was followed up with a surplus of $2.9 billion in 1998-99, marking the first back-to-back surpluses in nearly half a century. This achievement – remarkable in itself – is all the more impressive in light of the $42-billion deficit recorded in 1993-94.

With a budgetary surplus of $2.9 billion and a net source of funds from non-budgetary transactions of $8.6 billion, the financial surplus (excluding foreign exchange transactions) for 1998-99 was $11.5 billion, following a financial surplus of $12.7 billion 1997-98. 1998-99 marked the third consecutive year that the federal government recorded a financial surplus (excluding foreign exchange transactions). Including foreign exchange transactions, primarily relating to borrowing to supplement foreign exchange reserves, the net financial surplus stood at $5.8 billion for 1998-99.

Financial requirements/surplus is a measure of the Government's financial position that is broadly comparable to the measure of budgetary balance used by other major industrialized countries, including the United States. On this basis, Canada, the United States and the United Kingdom were the only G-7 countries in surplus positions in 1998-99 (measured in terms of their respective fiscal years).

The Budgetary Balance and Financial Requirements/ Surplus

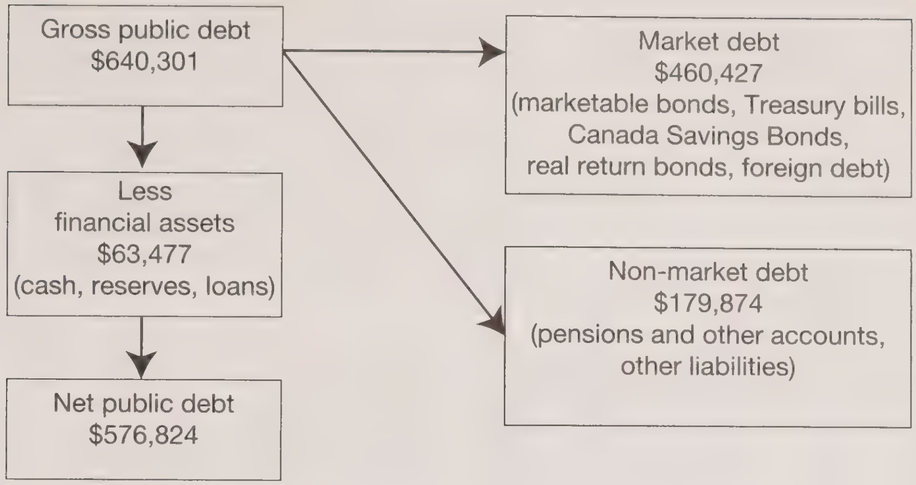
	(billions of dollars)
Budgetary balance	2.9
Net source of funds from non-budgetary transactions	8.6
Financial surplus (excluding foreign exchange transactions)	11.5
Net requirement of funds from foreign exchange transactions	(5.7)
Net financial surplus	5.8

The budgetary balance is presented on a modified accrual basis of accounting, recording government liabilities when they are incurred, regardless of when the cash payment is made.

In contrast, financial requirements/surplus measures the difference between cash coming in to the Government and cash going out. It differs from the budgetary balance in that it includes transactions in loans, investments and advances, federal employees' pension accounts, other specified purpose accounts, and changes in other financial assets and liabilities. These activities are included as part of non-budgetary transactions.

In 1998-99, the federal government's net public debt was $576.8 billion, down $6.4 billion from the 1996-97 level. Further, the level of market debt declined by $6.9 billion to $460.4 billion. Over the last two fiscal years, $16.4 billion of market debt has been retired.

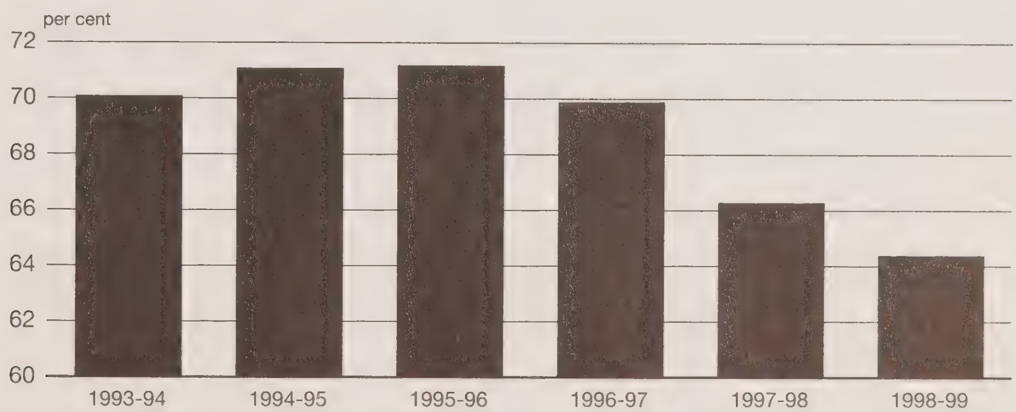
Total Public Debt as at March 31, 1999
(in millions of dollars)



The net debt-to-GDP ratio declined to 64.4 per cent in 1998-99 from its peak of 71.2 per cent in 1995-96.

The best indicator of the burden of debt is not the absolute level of debt but its relation to the size of the economy (the net debt-to-gross domestic product (GDP) ratio). The net debt-to-GDP ratio provides a measure of the ability of the economy to service the debt. The net debt-to-GDP ratio declined to 64.4 per cent in 1998-99 from its peak of 71.2 per cent in 1995-96 (see Chart 1).

Chart 1
Net debt-to-GDP ratio



Source: Department of Finance

The amount of every dollar of revenue the Government spends on interest on the public debt has dropped from 36 cents in 1995-96 to 27 cents in 1998-99.

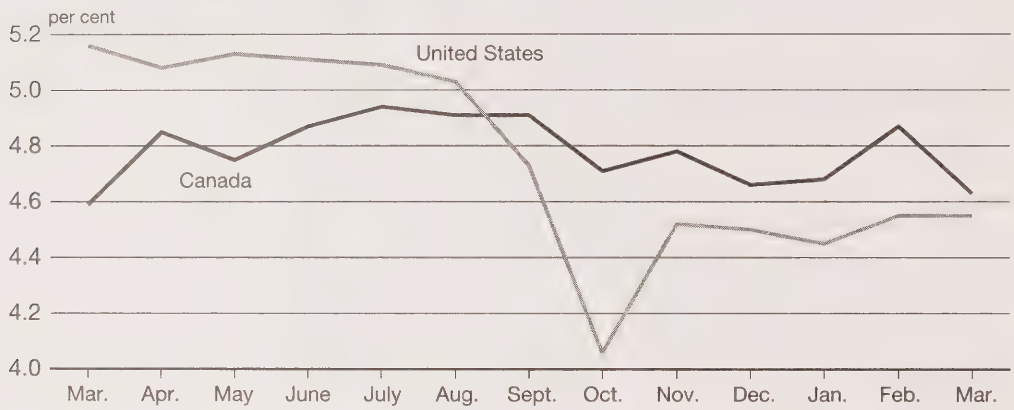
Public debt charges as a percentage of budgetary revenues – the interest ratio – was 27 per cent in 1998-99, down significantly from the peak of 36 per cent in 1995-96. Thus, the Government spent about 27 cents of every revenue dollar in 1998-99 on interest on the public debt. The cost of debt service underscores how important prudent management of the public debt is to all Canadians.

Market Developments in 1998-99

Canada's success in eliminating the deficit and keeping inflation low has reduced the cost of federal government borrowing.

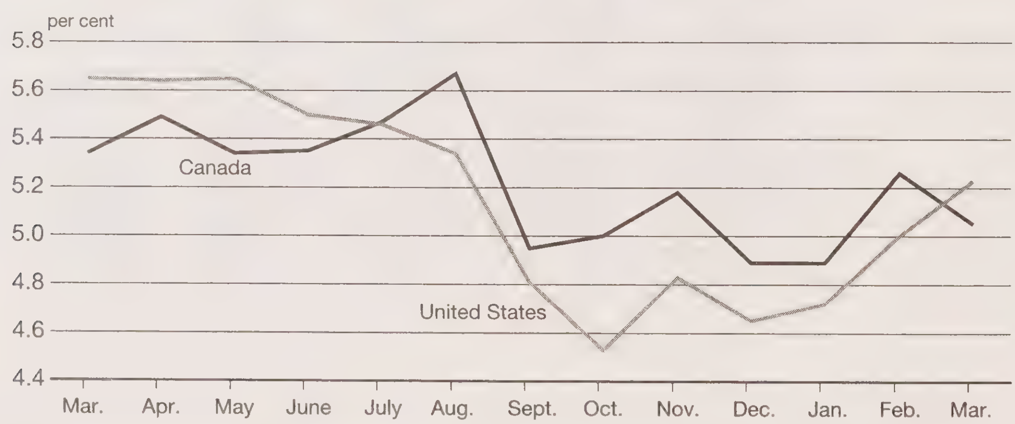
A favourable economic environment has lessened the cost of federal government borrowing in recent years. Canada's success in eliminating the deficit and keeping inflation low has helped keep interest rates near historically low levels. In the first quarter of 1998-99, short-term interest rates, which had been much lower than those in the US, started to increase (see Chart 2). By August, when the bank rate increased by 100 basis points, Canadian short-term rates had moved above those in the US. By the end of the year, short-term interest rates had retraced their increase, declining to virtually the same level as similar US rates. Long-term rates continued to decline over 1998-99 to historically low levels, rising modestly at fiscal year-end (see Chart 3).

Chart 2
3-month Treasury bill rates, 1998-99



Sources: Bank of Canada and Federal Reserve.

Chart 3
10-year government bond rates, 1998-99



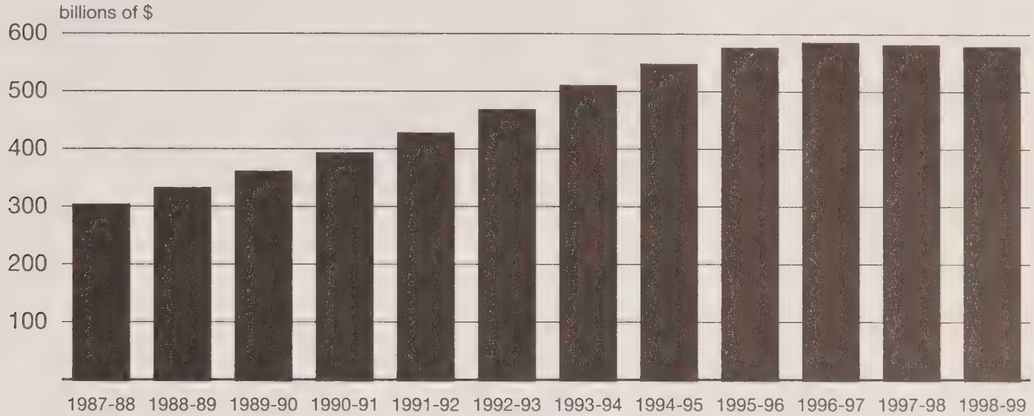
Sources: Bank of Canada and Federal Reserve.

Composition of the Federal Debt

Net public debt has declined by $6.4 billion in two years.

The 1998-99 budgetary surplus brought the federal government's net public debt – gross public debt net of the Government's financial assets (primarily cash and international reserves) – down to $576.8 billion from $579.7 billion in 1997-98 (see Chart 4).

Chart 4
Evolution of net public debt



Source: Public Accounts of Canada.

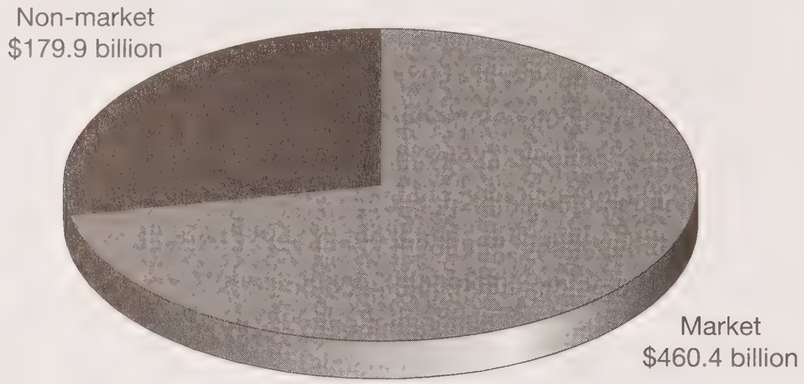
Gross public debt at the end of March 1999 totalled $640.3 billion (see Chart 5). Gross public debt is made up of two major components: market debt and non-market debt. Market debt is the portion of debt that is funded in the public markets and includes marketable bonds, Treasury bills, Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), foreign-currency-denominated bonds and bills, and bonds issued by the federal government to the Canada Pension Plan (CPP). At March 31, 1999, market debt outstanding was $460.4 billion. Non-market debt includes federal public sector pension liabilities, which are not funded in the public markets, and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt). At March 31, 1999, non-market debt totalled $179.9 billion.

At March 31, 1999, outstanding market debt was comprised of $284.1 billion of fixed-coupon nominal bonds, $11.7 billion of real return bonds (RRBs), $97.0 billion of Treasury bills, $27.7 billion of CSBs and CPBs, $4.1 billion of CPP bonds and $36.0 billion of foreign-currency-denominated securities (see Chart 6). In addition, the Government had $19.8 billion of interest-rate and cross-currency swaps outstanding as of March 31, 1999.

Chart 5

Gross public debt as at March 31, 1999

(Total $640.3 billion)

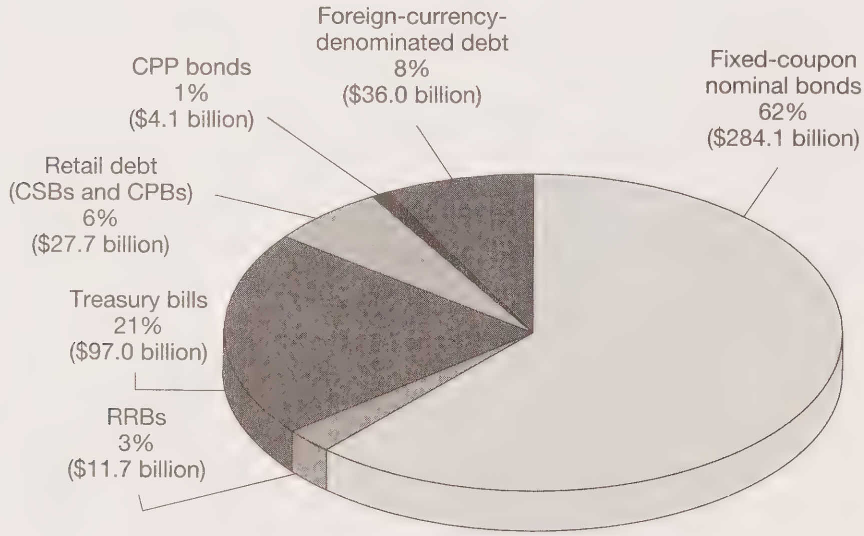


Source: Public Accounts of Canada.

Chart 6

Composition of federal market debt as at March 31, 1999

(Total $460.4 billion)



Note: Based on outstanding stock as at March 31, 1999.
Excludes effect of interest-rate and cross-currency swap agreements.
Numbers may not add due to rounding.

Source: Public Accounts of Canada.

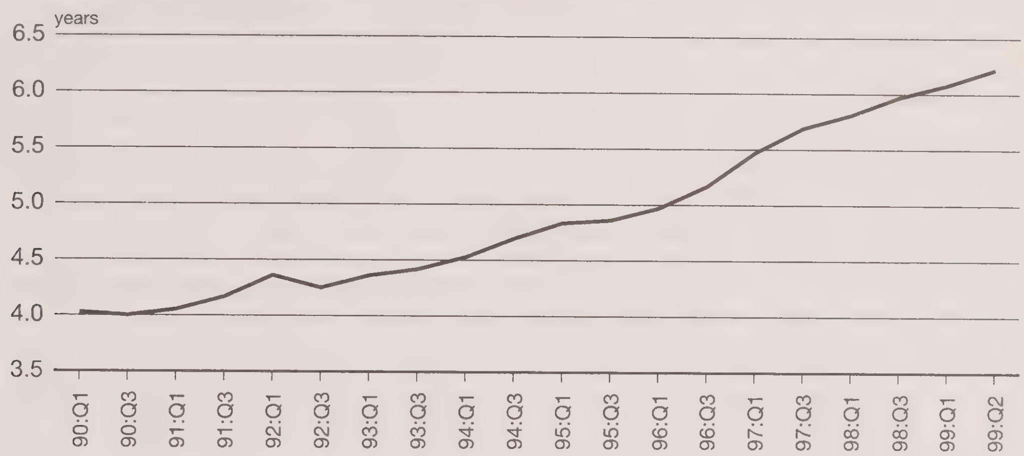
The Government has pursued the objective of greater stability of debt costs by reducing the exposure to changes in interest rates and moderating refinancing risk.

Since 1990, the Government has pursued the objective of greater stability of debt costs by increasing the fixed-rate share of its gross debt (debt which is maturing or being repriced in more than one year), thereby reducing the exposure to unexpected increases in interest rates and moderating refinancing risk.

The gradual change in the composition of the debt has led to a significant increase in the average term to maturity of marketable debt, from 4.0 years in January 1990 to 6.2 years in the second quarter of 1999 (see Chart 7).

Chart 7

Average term to maturity of marketable debt



Source: Bank of Canada.

Federal Debt Management Strategy 1998-99 Initiatives

The fundamental debt management objective is to raise stable, low-cost funding for the Government. A key strategic objective is the maintenance of a well-functioning domestic capital market. The federal government has taken a series of initiatives, outlined in *Debt Management Strategy 1998-99* (available on the Department of Finance Web site at: www.fin.gc.ca), to achieve these objectives.

Debt Management Strategy – Key Commitments

- Maintaining a prudent debt structure and broad investor base
- Maintaining a well-functioning Government of Canada securities market

Maintaining a Prudent Debt Structure and Broad Investor Base

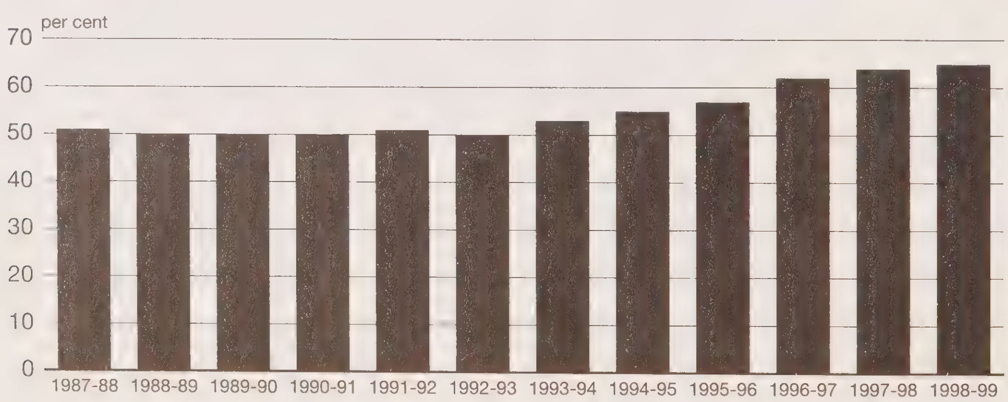
Prudent Debt Structure

Maintaining a prudent debt structure remains a priority.

As noted earlier, a major strategic focus for the past several years has been achieving greater stability of debt servicing costs, and minimizing the impact of unexpected market disruptions and refinancing risk by establishing a prudent debt structure. In 1998-99, the federal government continued to restructure its debt stock to ensure that it is less sensitive to changes in interest rates. It has achieved this by increasing the fixed-rate share of the Government's gross debt to two thirds in 1998-99 from 53 per cent in 1993-94 (see Chart 8). As a result, the impact of a 100-basis-point increase in interest rates on the budget balance in the first year of the increase is about $900 million lower today than at the time of the 1995 budget (i.e. $0.9 billion compared to $1.8 billion).

In order to maintain stable debt costs, the Government manages the fixed-rate portion of the debt to preserve an average target level of two thirds.

Chart 8
Fixed-rate share of gross debt as at March 31



Source: Department of Finance.

Diversified Investor Base

A diversified investor base helps reduce funding costs.

A diversified investor base helps reduce funding costs. The federal government pursues diversification of its investor base by maintaining a liquid and transparent domestic wholesale debt program that is attractive to investors, and internationally through the use of a broad array of sources of funds. In addition, Canada Investment and Savings (CI&S), the Government's retail debt agency, provides diversification by offering savings products designed to suit the needs of individual Canadians. In 1998-99, CI&S successfully introduced the Canada Premium Bond, which features longer-term pricing but has less cashability than the traditional Canada Savings Bond. The retail debt share, including both non-marketable and marketable debt, of the Government of Canada's total market debt increased to 23 per cent last year, thereby contributing to the Government's goal of maintaining a diversified investor base.

Maintaining a Well-Functioning Market

The federal government will continue to maintain the principles of liquidity, transparency and regularity.

A well-functioning Government of Canada securities market provides low-cost financing for the federal government by promoting broader participation in the market. Liquidity, transparency and regularity are the principles underlying the maintenance of a well-functioning market. Borrowing in the domestic market on a regular, pre-announced basis and building bond benchmarks reflects these principles. Initiatives to maintain market integrity are also key factors in keeping the cost of federal government borrowing low. The Government has already made structural adjustments to enhance the liquidity of the Government of Canada securities market and to ensure it continues to function well. For example, the weekly cycle of Treasury bill auctions was replaced by a biweekly cycle in September 1997 and the frequency of issuance of 30-year bonds was reduced to two times per year in April 1998. These types of initiatives, which continued through 1998-99, are detailed below.

Given the key role played by federal government securities in Canada's fixed-income market, adjustments to the domestic debt programs are made in consultation with market participants, and this was the case through 1998-99.

Buyback Program

A pilot bond buyback program was implemented in 1998-99 to help support a liquid primary market.

To enhance the liquidity of Government of Canada securities, a pilot bond buyback program was implemented in 1998-99. The purpose of this pilot program is to buy back existing, less liquid bonds to support the maintenance of a liquid primary bond market. By buying back less liquid outstanding bonds, the Government helps support a liquid primary market by being able to continue building large benchmark bonds at key maturities.

New Auction Rules

A number of initiatives have been pursued to ensure the integrity of the Government of Canada securities market is maintained.

Following extensive consultations with market participants, new auction rules and terms of participation relating to the primary distribution of Government of Canada securities were introduced on October 14, 1998. The new rules, which govern participation at auctions of Government of Canada securities, were designed to reinforce the integrity of the auction process and encourage broad participation in it.

IDA Code of Conduct

Parallel to the development of the revised auction rules, the federal government participated in the development of the Investment Dealers Association of Canada (IDA) Code of Conduct, establishing standards for the trading of debt securities in the secondary market. IDA Code of Conduct (Policy No. 5) was approved in September 1998. Together with the new auction rules, the integrity of the Government of Canada securities market has been significantly reinforced.

Treasury Bill Program Review

In the fall of 1998, the Government commenced consultations with market participants regarding the liquidity of the Treasury bill program. These consultations were completed in May of the current fiscal year. The Government and market participants were generally of the view that the existing structure of the Treasury bill program is working well, given current issuance levels, and that no changes are required.

Amendments to the Financial Administration Act

Amendments to the FAA were passed to modernize the federal government's debt and risk management capabilities.

In addition, amendments relating to the debt management sections of the *Financial Administration Act* (FAA) were passed through 1999 budget legislation. The relevant sections of the FAA, which date back to the 1950s, were amended to modernize the federal government's debt and risk management capabilities and clarify borrowing authority and the authority for setting the terms of distribution of federal government securities. These amendments are consistent with the changes in the auction rules made in 1998-99.

Government of Canada Securities Market

Canada's fixed-income market continues to be one of the most efficient in the world.

Canada's fixed-income market continues to be one of the most efficient in the world. Indicators of the efficiency, liquidity and depth of the market include tight bid-offer spreads for the various instruments, the large volume of transactions and high turnover ratios.

An efficient Government of Canada securities market is also of general benefit to the domestic capital market, where federal securities are key benchmarks for pricing and act as hedging tools.

Important complements to an efficient Government of Canada securities market are the availability of futures contracts, as well as the ability to strip and reconstitute bonds and enter into repurchase agreements.

Transparency System

A joint initiative of the IDA member firms and the Inter-Dealer Brokers Association, CanPX was announced in April 1999. On May 1, 1999, the CanPX transparency system was introduced to market participants, providing real time prices and quotes for key benchmark issues of government bonds and Treasury bills to all market participants. Future refinements of the CanPX system are under development.

Futures

In Canada, the trading volume of futures contracts has risen sharply over the past few years. There is an active futures contract based on 3-month bankers' acceptance rates (the BAX contract), as well as 5- and 10-year Government of Canada bond futures contracts (the CGF and CGB contracts). The futures contract on 3-month bankers' acceptances, which is the most actively traded contract on The Montreal Exchange, has become a highly liquid security. In 1997, the value of BAX open interest surpassed the amount of Treasury bills outstanding. Daily BAX trading volume rose 68 per cent to 27,104 contracts between 1996 and 1998, with an average daily open interest of 236,531 contracts. In addition, the open interest of the futures contract on 10-year Government of Canada bonds almost quadrupled from 1993 to 1998.

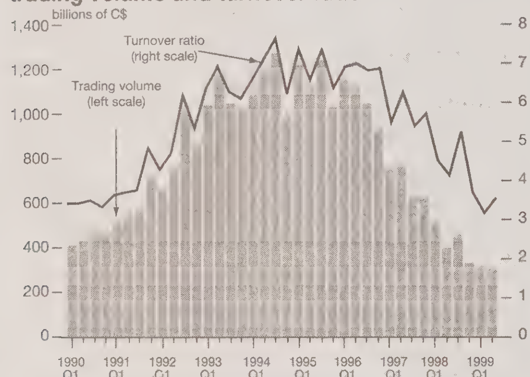
Stripping and Reconstitution

The Government also assists the Government of Canada strip bond market by allowing the Debt Clearing Service to provide separate CUSIP (Committee on Uniform Security Identification Procedures) numbers for each cash flow and allowing the reconstitution of cash flows back into conventional bonds. As of July 31, 1999, approximately 10 per cent of the par value of Government of Canada bonds outstanding had been stripped.

Government of Canada Securities Market

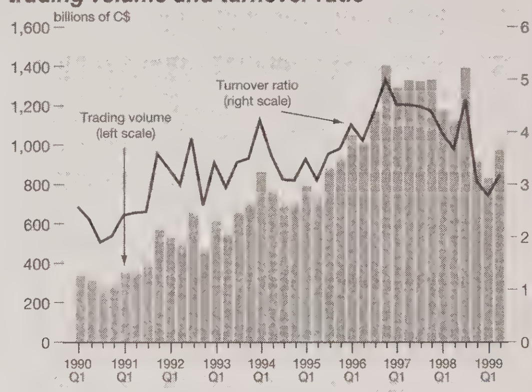
The volume of transactions in the Government of Canada bond market has grown significantly since 1990, but has dropped over the past year. The volume of transactions in the Treasury bill market increased sharply from 1990 to 1995, but has since declined as the stock of Treasury bills outstanding has fallen. In the second quarter of 1999, total Treasury bill turnover was $301.1 billion. The quarterly turnover ratio was 3.6 in 1999Q2 (see Chart 9). Total marketable bond turnover was $967.5 billion in the second quarter of 1999, a 193-per-cent increase from the first quarter of 1990. The quarterly turnover ratio was 3.2 in 1999Q2 compared to 2.6 in the first quarter of 1990 (see Chart 10).

Chart 9
Government of Canada Treasury bills trading volume and turnover ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

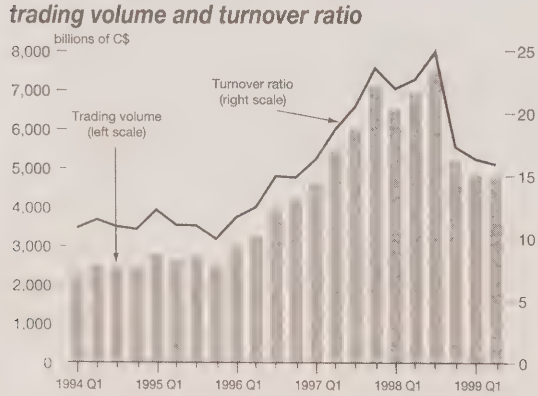
Chart 10
Government of Canada bonds trading volume and turnover ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

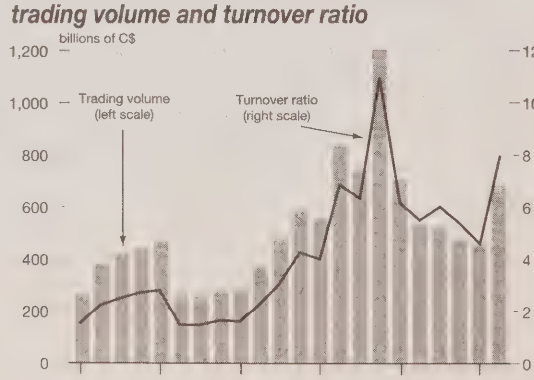
The significant growth in the trading volume and turnover ratios in the repo market over the past four years provides further evidence of an extremely efficient Canadian government securities market. The total quarterly turnover for Government of Canada bond repos has increased from $2,194 billion in the first quarter of 1994 to $4,671 billion in the second quarter of 1999. Furthermore, the quarterly turnover ratio for bond repos in 1999Q2 was 15.9, up from about 11 in early 1994 (see Chart 11). The Treasury bill repo market is less active than the bond repo market; nevertheless, it is quite efficient, with total quarterly turnover in 1999Q2 at $675.8 billion and a quarterly turnover ratio of 8.0 (see Chart 12).

Chart 11
Government of Canada bond repos trading volume and turnover ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 12
Government of Canada Treasury bill repos trading volume and turnover ratio



Trading volume is total trading volume in each quarter.
Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Federal Debt Managers

The Department of Finance, in conjunction with the Bank of Canada and Canada Investment & Savings (CI&S), the Government's retail debt agency, manages federal market debt. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, including borrowings for official reserve purposes and the management of financial risks.

The Division works in partnership with the Bank of Canada, the Government's fiscal agent, on all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management, e.g. conducting the auctions of government debt, issuing debt instruments, making interest payments and foreign-currency-borrowing operations. The Bank also has responsibility for monitoring market activities and advising on debt management policy issues, as well as operating the Government's Risk Management Unit.

Primary responsibility for the management of the retail debt portion of federal market debt is carried out by CI&S. CI&S is a special operating agency of the Government and is responsible for achieving the fundamental debt management objective of stable, low-cost funding by developing and implementing the retail component of the federal government's domestic debt program.

1998-99 Debt Management Operations by Program

As a result of the budgetary surplus achieved in 1998-99, the federal government retired $6.9 billion of its market debt during this period. Total domestic debt alone declined by $16.3 billion. The share of market debt held in short-term instruments, primarily Treasury bills, decreased while the share held in longer-term instruments increased slightly.

Table 2
Composition of federal market debt, 1998-99

	March 31, 1998	March 31, 1999	Change
		(billions of C$)	
C$-denominated			
Fixed-coupon bonds	284.7	284.1	-0.6
Real return bonds*	9.9	11.7	1.8
Treasury bills	112.3	97.0	-15.3
Canada Saving Bonds and Canada Premium Bonds	29.8	27.7	-2.1
Total domestic debt	436.7	420.4	-16.3
Foreign-currency-denominated			
Canada Bills	9.4	10.2	0.8
Foreign bonds	14.7	19.6	4.9
Canada Notes	1.7	1.3	-0.4
Euro Medium-Term Notes	1.5	4.9	3.4
Total foreign debt	27.2	36.0	8.8
CPP bonds	3.5	4.1	0.6
Total market debt	467.3	460.4	-6.9

* Includes CPI adjustment.

Note: As at March 31, 1999, the total amount of interest-rate and cross-currency swaps outstanding stood at $19.8 billion.

Numbers may not add due to rounding.

Domestic Debt

A key principle of domestic debt management is that the funding required for the Government's domestic operations is raised in the domestic market.

Fixed-Coupon Marketable Bonds and Bond Repurchase Transactions

Fixed-coupon marketable Government of Canada bonds are issued in Canadian dollars and pay interest semi-annually.

Net new issuance of fixed-coupon marketable bonds during the year totalled -$0.6 billion (gross issuance less maturing issues), bringing the stock of outstanding marketable bonds down to $284.1 billion as at March 31, 1999. This includes two bond repurchase operations of $500 million each. The first took place in December 1998 for selected bonds in the 5-year maturity sector, with the second bond repurchase held in February 1999 in the 10-year sector.

In 1998-99, gross issuance of marketable bonds consisted of $14.0 billion of 2-year bonds, $9.8 billion of 5-year bonds, $9.2 billion of 10-year bonds and $3.3 billion of 30-year bonds (issuance of 3-year bonds ceased in 1997-98). Marketable bonds represent the largest component (62 per cent) of the federal government's outstanding market debt.

The distribution of the outstanding stock of fixed-coupon marketable bonds at the end of 1998-99 is shown in the following table.

Table 3
Outstanding fixed-coupon marketable bonds as at March 31, 1999

	(billions of C$)
0-2 years	78.9
2-5 years	77.7
5-10 years	66.6
10-30 years	60.9
Total	**284.1**

Real Return Bonds (RRBs)

Real return bonds, introduced in 1991, provide cost-effective diversification of the marketable bond program for the Government as the implied real rates on comparable nominal bonds generally exceed the real rate offered on RRBs. RRBs serve the needs of investors such as indexed pension funds, and are issued via quarterly single-price auctions.

Issuance of RRBs in 1998-99 totalled $1.6 billion through four issues, bringing the level of outstanding RRBs to $11.7 billion as at March 31, 1999 (this includes $0.9 billion in consumer price index adjustment).

Treasury Bills

Treasury bills with terms to maturity of 3, 6 and 12 months are offered on a biweekly basis. Cash management bills of shorter maturity than typical Treasury bills are issued from time to time to facilitate the management of the Government's cash balances.

The stock of outstanding Treasury bills decreased by $15.3 billion during the 1998-99 fiscal year to a level of $97.0 billion at March 31, 1999.

Retail Debt

Retail debt is broadly defined as Government of Canada securities held by individual Canadians, and includes both non-marketable and marketable debt.

In 1998-99, the Canada Savings Bond (CSB) and the Canada Premium Bond (CPB) were on sale concurrently for a six-month pilot. The CSB featured 1-year pricing and cashability at any time. The CPB featured longer-term pricing but with

reduced cashability. Both bonds have Registered Retirement Savings Plan (RRSP) and Registered Retirement Income Fund (RRIF) options. The introduction of the CPB was very successful, with sales accounting for almost half of total sales.

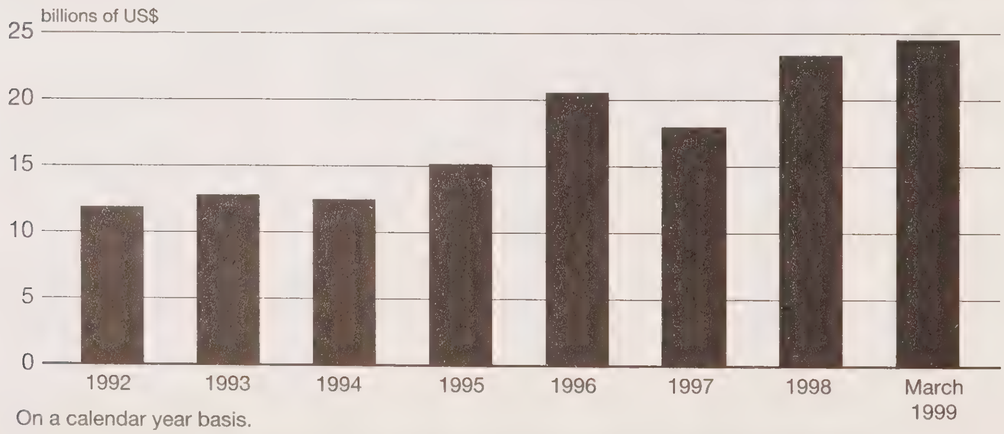
The retail debt share, including both non-marketable and marketable debt, of the Government of Canada total market debt increased to 23 per cent last year, thereby contributing to the Government's goal of maintaining a diversified investor base. The non-marketable component of retail debt decreased by $2.1 billion in 1998-99, in line with lower Government funding requirements. The decline in non-marketable debt was offset by an increase in the individual holdings of marketable debt. In addition, the rollout of the new Payroll Savings Program continued in 1998-99 and now accounts for about 50 per cent of total payroll sales.

Foreign-Currency Debt

The Government of Canada borrows in foreign currencies to raise foreign exchange reserves for the Exchange Fund Account (EFA). The EFA is a pool of assets used to promote order and stability of the Canadian dollar in the foreign exchange market. Foreign exchange reserves are also held for general liquidity purposes. The major objectives of Canada's reserve program are to ensure an appropriate level of reserves is maintained while minimizing the cost of carrying reserves and prudently managing risk.

The Government has made a steady effort to increase Canada's international reserves to bring the level more in line with comparable sovereigns. This is consistent with announcements made in the 1996 and 1998 budgets. Reserves have been increased from US$11.9 billion at December 31, 1992 to US$24.6 billion at March 31, 1999 (see Chart 13). Specifically, for 1998-99 alone, international reserves increased by US$2.5 billion, while foreign debt rose by US$4.7 billion. The increased foreign borrowing was in part to replenish foreign reserves used during the year to maintain order in the Canadian dollar market.

Chart 13
Canada's international reserves: December 1992 to March 1999



On a calendar year basis.
Sources: Department of Finance, International Monetary Fund, *International Financial Statistics.*

As of March 31, 1999, foreign-currency liabilities stood at US$33.8 billion – (US$23.8 billion in foreign-currency debt and US$10.0 billion in cross-currency swaps). Canada's direct foreign currency debt represents less than 8 per cent of its total outstanding market debt; taking the effect of swaps into account, this proportion is 11 per cent.

Foreign-currency debt outstanding consists of Canada Bills, Canada Notes, Euro Medium-Term Notes and foreign bonds. The Government of Canada also obtains foreign-denominated funding through cross-currency swaps of domestic obligations. Annex 2 provides further details on Canada's foreign currency debt, with 1998-99 highlights by program outlined below.

Table 4
Foreign-currency liabilities as at March 31, 1999

	(billions of US$)
Canada Bills	6.7
Canada Notes	0.8
Euro Medium-Term Notes	3.3
Foreign bonds	13.0
Total foreign-currency debt	**23.8**
Cross-currency swaps	10.0
Total foreign-currency liabilities	**33.8**

Numbers may not add due to rounding.

Canada Bills and Canada Notes

Canada Bills, which are short-term promissory notes denominated in US dollars, are issued in the US market as a source of low-cost US dollar funding. The level of outstanding Canada Bills increased from US$6.6 billion to US$6.7 billion during 1998-99. Net issuance decreased compared to 1997-98 levels.

Canada Notes are used as required to raise fixed- and floating-rate funding for terms longer than nine months. The stock of outstanding Canada Notes, which the Government began to issue in March 1996, decreased from US$1.2 billion to US$0.8 billion during 1998-99. In addition, an inaugural JPY 50 billion 10-year note was issued in March 1999 (see Annex 1 for details).

Euro Medium-Term Notes (EMTNs)

The EMTN program, introduced in March 1997, diversifies the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under the new program can be denominated in a range of currencies and structured to meet investor demand. Obligations are usually swapped to US dollars, the primary currency held in the foreign exchange reserves. In 1998-99, the federal government executed 10 transactions under the EMTN program (see Annex 1 for details).

Foreign-Currency-Denominated Bonds

At the end of 1998-99, Canada had US$13.0 billion equivalent in fixed-rate bonds outstanding (of which US$3.3 billion was issued in 1997-98 and US$4.7 was issued in 1998-99). The US$4.7 billion equivalent of fixed-rate bonds issued in 1998-99 consisted of two global bonds (see Annex 1 for details).

Cross-Currency Swaps

A cross-currency swap is an agreement that exchanges one type of return for another (e.g. a fixed for a floating rate of interest) and also exchanges the principal amount for the term of the swap. Cross-currency swaps of domestic obligations are a cost-effective alternative to foreign-currency-denominated bond issues, as a means of meeting the Government's targets for longer-term foreign-currency funding. In 1998-99, the federal government raised US$4.7 billion in foreign exchange reserves at cost-effective funding levels by entering into 59 cross-currency swaps. This is an increase from the previous fiscal year, when the Government had entered into 13 cross-currency swaps to raise US$3.6 billion in foreign exchange reserves. The total amount of cross-currency swaps outstanding as at March 31, 1999 stood at US$10.0 billion.

Management of the Government's Cash Balances

Management of the Government's cash balances requires forecasting and monitoring of the Government's daily receipt and disbursement flows, as well as an ongoing borrowing program to refinance maturing debt and maintain the balances at or above targeted levels. There are inherent and large uncertainties in forecasting daily changes in cash balances, owing to the scope of the Government's financial operations, the operations of the Bank of Canada and changes in market conditions. An adequate level of cash balances must be maintained at all times to meet these operational requirements and provide an appropriate liquidity cushion for the Government's financial operations.

The level of the Government's daily cash balances averaged $7.1 billion in fiscal 1998-99, down from $8.1 billion in 1997-98.

Cash balances are invested as term deposits with participants of the recently established Large Value Transfer System. These deposits are placed with the institutions through an auction process in order to earn competitive market rates of return. In 1998-99, earnings on term deposits averaged 5.06 per cent versus 3.96 per cent the previous year. Increased earnings on term deposits reflect the general increase in interest rates.

Distribution of Holdings of Government of Canada Debt

Domestic Holdings of Government of Canada Debt

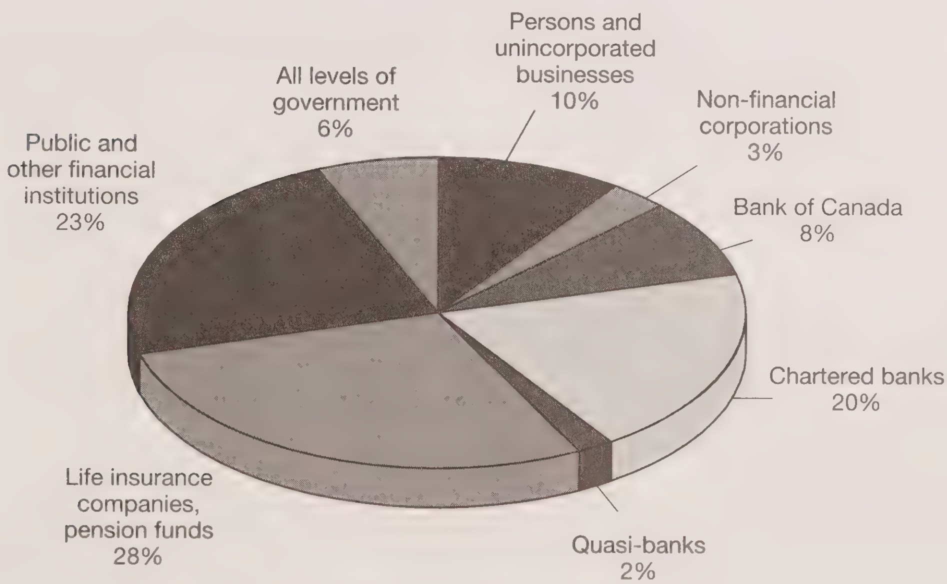
In 1998 (the latest year for which figures are available) life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (28 per cent), followed closely by public and other financial institutions such as investment dealers and mutual funds (see Chart 14). Taken together, they accounted for 51 per cent of domestic holdings.

Bonds and bills held by public and other financial institutions increased sharply over the 1990-1998 period – from 8 per cent in 1990 to 23 per cent in 1998. Much of the increase can be attributed to a significant increase in holdings by mutual funds.

Chartered banks' share of holdings of market debt more than doubled, from 9 per cent in 1990 to 20 per cent in 1998, while the share of persons and unincorporated businesses decreased by almost 25 percentage points since 1990 to 10 per cent of domestic holdings.

Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

Chart 14
Distribution of domestic holdings of Government of Canada market debt, 1998



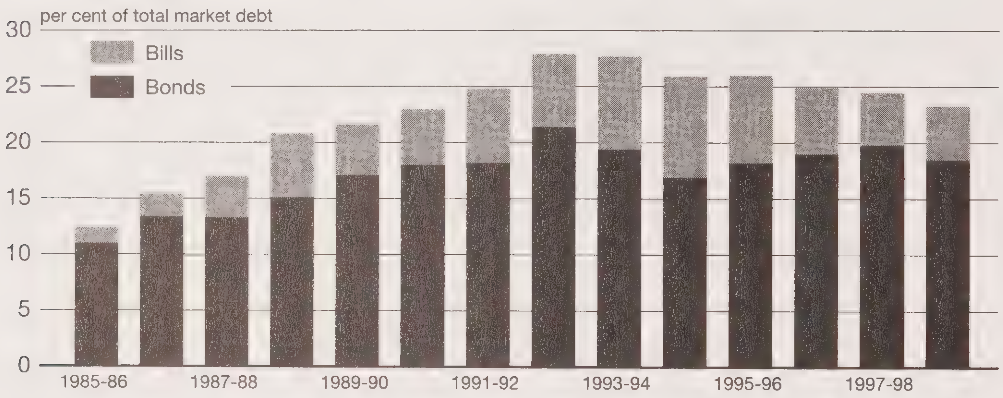
Total: $346.0 billion at December 31, 1998.
Source: Statistics Canada, *The National Balance Sheet Accounts.*

Non-Resident Holdings of Government of Canada Debt

Non-resident holdings of the Government of Canada's total market debt decreased by $8.2 billion in fiscal year 1998-99. Total non-resident holdings were estimated to be $107.1 billion at the end of March 1999, representing about 23.3 per cent of the Government of Canada's total market debt. Since 1992-93, the share of total market debt held by non-residents has been steadily declining (see Chart 15).

Non-residents held $85.3 billion in government bonds in 1998-99, a decrease of $7.6 billion from the previous year. Non-resident holdings of bills (Treasury bills and Canada Bills) amounted to 4.8 per cent of total market debt at March 31, 1999. Non-resident holdings of bills declined by $0.5 billion over the fiscal year (see Reference Table V).

Chart 15
Non-resident holdings of Government of Canada market debt



Source: Statistics Canada, *Canada's International Transactions in Securities.*

Annex 1

Details on Canada's Foreign-Currency Debt

Foreign-Currency-Denominated Bonds

At the end of 1998-99, Canada had US$13.0 billion equivalent of fixed-rate bonds outstanding (of which US$3.3 billion was issued in 1997-98 and US$4.7 billion was issued in 1998-99).

The US$4.7 billion equivalent of fixed-rate bonds issued in 1998-99 consisted of two global bonds:

- in June, a DM4.0-billion 4⅞-per-cent 10-year global bond due July 7, 2008; and
- in October, a US$2.5-billion 5¼-per-cent 10-year global bond due November 5, 2008, Canada's largest issue ever in US dollars, was issued (it received public recognition as the second-best US-dollar bond deal of 1998).

Cross-Currency Swaps

In 1998-99, the federal government raised US$4.7 billion in foreign exchange reserves at attractive funding levels by entering into 59 cross-currency swaps, bringing the total of cross-currency swaps to US$10.0 billion.

Euro Medium-Term Notes (EMTNs) and Canada Notes

In 1998-99, the federal government executed 10 transactions under the EMTN program and 1 transaction under the Canada Notes program:

- in May 1998, Hong Kong dollar 200-million 9.14-per-cent 3-year notes (privately placed);
- in June 1998, Greek drachma 20-billion 7½-per-cent 5-year notes due July 16, 2003;
- in August 1998, US$75-million 5.337-per-cent 1-year notes due August 27, 1999 (privately placed);
- in September 1998, US$200-million 4.991-per-cent 1-year notes due September 23, 1999;
- in October 1998, British pound 300-million 6¼-per-cent notes due November 26, 2004; reopened for another GBP200 million, raising the total outstanding to GBP500 million. This transaction marked the first time that Canada reopened a public Eurobond issue;
- also in October 1998, inaugural French franc 4-billion 10-year notes due April 28, 2009 (the issue received public recognition as the best French franc bond issue of 1998) – re-denominated into EUR610 million on April 28, 1999; fungible with the Euro Note issued in March 1999;

- in January 1999, US$300-million 5.125-per-cent 3-year notes due January 22, 2002;
- in January 1999, Hong Kong dollar 200-million 7.05-per-cent 1-year notes due February 9, 2000 (privately placed);
- in March 1999, Norwegian kronor 700-million 5.40-per-cent 5-year notes due November 30, 2004;
- in March 1999, a EUR390-million 4 1/2-per-cent 10-year notes due April 28, 2009; and
- also in March 1999, Japanese yen 50-billion 1.9-per-cent 10-year Canada Notes due March 23, 2009.

Annex 2

Government of Canada Market Debt Instruments

Fixed-Coupon Marketable Bonds

Effective October 1995, Government of Canada marketable bonds are issued in global certificate form only whereby a global certificate for the full amount of the bonds is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). The bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing System (DCS), which is operated by the CDS, and only in integral multiples of $1,000 (face value). Prior to December 1993, Government of Canada bonds were issued in coupon-bearer and fully registered form, and were available in denominations ranging from $1,000 to $1,000,000. Between December 1993 and September 1995, Government of Canada bonds were only issued in fully registered form. All Canadian dollar marketable bonds are non-callable. All Canadian dollar marketable bonds pay a fixed rate of interest semi-annually.

Issues of government bonds are sold via public tender, with the Bank of Canada acting as the Government's fiscal agent, to primary distributors made up of securities dealers that operate in Canada and are members of the Investment Dealers Association of Canada, and a small number of Canadian chartered banks. These sales are via multiple-price auction.

Government of Canada Real Return Bonds (RRBs)

Government of Canada real return bonds pay semi-annual interest based upon a real interest rate. Unlike standard fixed-coupon marketable bonds, interest payments on RRBs are adjusted for changes in the consumer price index (CPI). The CPI, for the purposes of RRBs, is the all-items CPI for Canada, not seasonally adjusted, published monthly by Statistics Canada. The semi-annual nominal coupon payments are calculated as follows:

coupon payment$_i$ = real coupon rate/2 * (principal + inflation compensation$_i$)

where inflation compensation$_i$ = ((principal * reference CPI$_i$/reference CPI$_{base}$) - principal).

Reference CPI for the first day of any calendar month is the CPI for the third preceding calendar month. The reference CPI for any other day in a month is calculated by linear interpolation between the reference CPI applicable to the first day of the month in which such day falls and the reference CPI applicable to the first day of the month immediately following. The reference CPI$_{base}$ for a series of bonds is the reference CPI$_i$ applicable to the original issue date for the series.

At maturity, bondholders will receive, in addition to a coupon interest payment, a final payment equal to the sum of the principal amount and the inflation compensation accrued from the original issue date – i.e. final payment = principal + ((principal * reference CPI$_{maturity}$/reference CPI$_{base}$) - principal).

These bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the DCS and only in integral multiples of $1,000 (face value). New issue distribution is through single-price auction to primary distributors.

Canada Savings Bonds (CSBs)

Canada Savings Bonds are currently offered for sale by most financial institutions in Canada. Additionally, some 15,000 organizations sponsor the payroll program, thus allowing many Canadians to purchase CSBs through payroll deductions.

Except in certain specific circumstances, CSBs can only be registered in the name of residents of Canada and are available in both regular interest and compound interest forms. For those CSBs which are certificated, denominations range from $100 to $10,000. All CSBs are non-callable and, except in certain limited circumstances, non-transferable.

CSBs pay a competitive rate of interest which is guaranteed for one or more years. New issues currently offer a 10-year maturity. CSBs may be cashed at any time and, after the first three months, pay interest up to the end of the month prior to encashment.

Canada Premium Bonds (CPBs)

The Canada Premium Bond is a new retail investment and savings product introduced by the Government of Canada in 1997 (known then as the Canada RRSP Bond).

The CPB offers a higher interest rate at the time of issue compared to the CSB on sale at the same time and is only redeemable once a year on the anniversary of the issue date or during the 30 days thereafter without penalty.

Treasury Bills

Effective November 1995, all new issues of Treasury bills are issued is global certificate form only whereby a global certificate for the full amount of the Treasury bills is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). Treasury bills must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by the CDS, and only in integral multiples of $1,000 (face value). Prior to November 1995, Treasury bills were issued in bearer form and were available in denominations ranging from $1,000 to $1,000,000.

Treasury bills are sold by public tender on a discount basis to primary distributors of Government of Canada securities. Treasury bills with terms to maturity of approximately 3, 6, or 12 months are currently auctioned on a biweekly basis, generally on Tuesday for delivery Thursday. Under the biweekly issuance pattern, new 3-month (98 days) Treasury bills are issued at each biweekly auction. New 6- and 12-month Treasury bills are offered in the same week and then reopened once at the next regular auction two weeks later.

Cash management bills (CMBs) are also periodically issued by the Government of Canada. CMBs are Treasury bills with maturities of less than three months (they can be as short as one day) used as a source of short-term financing for the Government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Canada Bills

Canada Bills are promissory notes denominated in US dollars and issued only in book-entry form. They mature not more than 270 days from their date of issue and are discount obligations with a minimum order size of US$1,000,000 and a minimum denomination of US$1,000. Delivery and payment for Canada Bills occur in same-day funds through Chase Manhattan Bank in New York City.

Primary distribution of Canada Bills occurs through five dealers in New York: CIBC Wood Gundy Inc., CS First Boston, Goldman, Sachs & Co., Lehman Brothers and RBC Dominion Securities Inc. Rates on Canada Bills are posted daily for terms of one to six months.

Canada Bills are issued for foreign exchange reserve funding purposes only.

Canada Notes

Canada Notes are promissory notes usually denominated in US dollars and available in book-entry form. Canada Notes are issued in denominations of US$1,000 and integral multiples thereof. At present, the aggregate principal amount outstanding issued under the program is limited to US$10.0 billion. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate.

The interest rate or interest rate formula, the issue price, stated maturity, redemption or repayment provisions, and any other terms are established by Canada at the time of issuance of the notes and will be indicated in the Pricing Supplement. Delivery and payment for Canada Notes occur through the Bank of Montreal Trust Company in New York City.

The notes are offered on a continuous basis by Canada through five dealers: CS First Boston, Goldman, Sachs & Co., Lehman Brothers, Nesbitt Burns Inc. and Scotia Capital Markets. Canada may also sell notes to other dealers or directly to investors.

Canada Notes are issued for foreign exchange reserve funding purposes only.

Euro Medium-Term Notes (EMTNs)

EMTNs are medium-term notes issued outside the United States and Canada. They are issued with fixed or floating interest rates, include embedded options, make coupon payments in one currency and the principal payment in another currency, and maturities can range from short-term to long-term. Canada EMTNs are sold either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as Canada's agent for the particular transaction (called reverse inquiry). Canada EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs from Canada is responsible for the sale of the notes) and on an intermittent basis.

The Arranger for Canada's EMTN program is Morgan Stanley Dean Witter. The London-based dealer group includes CIBC Wood Gundy Oppenheimer, Deutsche Bank, Merrill Lynch International, Morgan Stanley Dean Witter, RBC DS Global Markets, Daiwa Europe Limited, Goldman Sachs International, J.P. Morgan Securities Ltd., Nomura International and Warburg Dillon Read.

The EMTN program further diversifies the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand.

Annex 3

New Auction Rules/Terms of Participation

Following extensive consultation with market participants, new auction rules and terms of participation relating to the primary distribution of Government of Canada securities were introduced on October 14, 1998. The new rules, which govern the participation of financial intermediaries and end-investors eligible to bid at auctions of Government of Canada securities, were designed to reinforce the integrity of the auction process and to encourage broad participation in it.

Under the new rules and terms of participation, there are 25 government securities distributors that participate in the primary distribution of bonds and Treasury bills. All government securities distributors must: (i) be members, or affiliates of members, of the Investment Dealers Association of Canada (IDA), and (ii) have their core trading and sales operations for Government of Canada securities resident in Canada.

Those government securities distributors that reach a specific threshold level of primary and secondary market activity in Government of Canada securities become a primary dealer, with commensurate responsibilities, and form part of the core group of distributors of Government of Canada securities. There are, at present, 15 primary dealers. The primary dealer designation can be attained for either Treasury bills or bonds, or both.

Primary dealers assume a number of responsibilities with respect to Government of Canada securities. They must comply with minimum bidding requirements for every Treasury bill and bond auction so as to provide coverage of auctions as a group, and consistently make two-sided markets in Treasury bills and bonds to a broad customer base. All government securities dealers have ongoing reporting requirements and special requirements to provide the Bank of Canada, on request, with market information (including trade activity and position reports) involving Government of Canada securities. In addition, all bidders at auctions of Government of Canada securities (including customers) must abide by IDA Policy No. 5 governing standards for trading of debt securities in Canada.

There are bidding limits for government securities distributors and end-investors (or customers) at Treasury bill and bond auctions. For Treasury bill auctions, a primary dealer has a bidding limit for its own account of 25 per cent of each tranche being auctioned, while a government securities distributor has a limit of 10 per cent. The bidding limits for Government of Canada bond auctions vary by distributor depending on the firm's relative activity in the primary and secondary markets for these securities. Primary dealers have bond-bidding limits for their own account of between 10 per cent and 25 per cent of the amount of bonds being tendered, while government securities distributors have bond-bidding limits of between 1 per cent and 9 per cent.

The bidding limits for a customer for both Treasury bill and bond auctions are 25 per cent of the amount auctioned. Customer bids are submitted through government securities distributors.

The new rules feature several measures to ensure that the auction process cannot be used to help accumulate a controlling position in a Government of Canada security: each auction participant's bidding limit is reduced by the bidder's excess net long position (i.e. its net long position in excess of the product of its bidding limit and the par value of the outstanding stock of the security being auctioned); and the aggregate limit for the sum of bids submitted by a primary dealer for its own account and on behalf of its customers cannot exceed 40 per cent of the tender less the dealer's excess net long position.

More information on the new auction rules and terms of participation is available at the Bank of Canada's Web site: www.bank-banque-canada.ca.

Annex 4

Selected News Service Pages of Interest to Government of Canada Debt Market Participants

Bloomberg

WCR	– Exchange rates
PXCA	– Government of Canada benchmark bonds
PXCB	– Government of Canada bonds
CND	– Summary page of benchmark Canadian securities

Telerate

261	– Exchange rates
3105	– US/Canada capital markets
3109	– Quarterly bond auction schedule
3110	– Latest marketable bond auction results
3111	– Treasury bill auction results
3112	– Cumulative excess settlement balances/overnight rate
3143	– Multicontributor page – Government of Canada bonds
3144	– Multicontributor page – Canadian money markets
3159	– Canadian yield curve/spread differentials to US
3190	– Canadian money markets
3193	– Cash management bill auction results
3195	– Latest RRB auction results
3196	– Government of Canada and provincial government bonds
3197	– 10:00 a.m. fixing – Canadian BA rates
3198	– 10:00 a.m. fixing – Government of Canada Treasury bills
9728	– 10:30 a.m. Bank of Canada jobber averages – money market instruments
27455	– 10-year CGB futures (Montreal Exchange)
27456	– BAX futures (Montreal Exchange)
27458	– 10-year bond cheapest-to-deliver (CGB futures) implied repo rate

Reuters

WRLD	– Exchange rates
BOFC	– Canadian dollar exchange rates
CRRBONDS	– Benchmark Government of Canada bonds and money markets
CAACTIVE= <F3>	– Government of Canada bonds and Treasury bills
CDMM	– Canadian money markets
CDBN	– Canadian bonds
CABONDT	– US/Canada capital markets
CDOR	– 10:00 a.m. fixing – Canadian BA rates
CDOS	– 10:00 a.m. fixing – Canadian Treasury bill rates
FPRH	– Swap quotes
MON/FUTEX1	– Montreal Exchange futures contracts (BAX, CGF, CGB)

Department of Finance – Government of Canada Securities Internet Address
http://www.fin.gc.ca/secur/gocsec_e.html
Bank of Canada Home Page Internet Address
http://www.bank-banque-canada.ca

Annex 5

Glossary

budgetary surplus: Occurs when government annual revenues exceed budgetary expenditures. A deficit is the shortfall between government revenues and budgetary spending.

Contingency Reserve: Is included in the budget projections primarily to cover risks arising from unavoidable inaccuracies in the models used to translate economic assumptions into detailed budget forecasts, and unpredictable events. The Contingency Reserve also provides an extra measure of backup against adverse errors in the economic forecast. It is not a source of funding for new policy initiatives.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar on the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

financial requirements/surplus: Measure the difference between the cash coming in to the Government and the cash going out. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet the Government's financing needs in any given year.

foreign exchange reserves: Stocks of foreign exchange assets (e.g. interest-earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

gross public debt: Total amount the Government owes. It consists both of market debt in the form of outstanding securities such as Treasury bills and Canada Savings Bonds, and internal debt owed mainly to the superannuation fund for government employees and other current liabilities.

interest-bearing debt: Consists of unmatured debt, or market debt, and the Government's liabilities to internally held accounts such as federal employees' pension plans.

market debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets, and includes marketable bonds, Treasury bills, retail debt (primarily Canada Savings Bonds), foreign-currency-denominated bonds and bills, as well as bonds issued to the Canada Pension Plan.

marketable debt: A marketable debt instrument is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

net public debt: Consists of interest-bearing debt and other liabilities, net of financial assets.

non-market debt: Includes the Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt).

Reference Tables

Reference Table I

Gross public debt, outstanding market debt and debt charges

Fiscal year ending March 31	Gross public debt: Outstanding	Gross public debt: Fixed-rate portion[1]	Gross public debt: Average fixed-rate portion[2]	Gross public debt: Total debt charges	Outstanding market debt: Outstanding	Outstanding market debt: Fixed-rate portion	Outstanding market debt: Total debt charges	Outstanding market debt: Average interest rate
	($ billions)	(per cent)	(per cent)	($ billions)	($ billions)	(per cent)	($ billions)	(per cent)
1985-86	274.8	51.9	–	25.4	201.2	36.7	20.7	10.66
1986-87	308.9	50.9	–	26.7	228.6	36.9	21.5	9.34
1987-88	340.1	51.2	–	29.0	250.8	38.2	23.1	9.61
1988-89	371.5	49.6	–	33.2	276.3	37.2	26.5	10.82
1989-90	397.2	49.9	–	38.8	294.6	38.1	31.4	11.20
1990-91	433.3	50.4	–	42.6	323.9	38.5	34.3	10.72
1991-92	467.4	50.7	–	41.2	351.9	38.9	32.4	8.86
1992-93	503.9	50.4	–	38.8	382.7	39.0	29.4	7.88
1993-94	546.4	53.3	–	38.0	414.0	42.7	28.0	6.75
1994-95	584.8	55.1	–	42.0	441.0	44.4	31.4	7.97
1995-96	624.7	56.9	–	46.9	469.5	47.9	35.3	7.34
1996-97	640.7	61.7	–	45.0	476.9	53.8	33.0	6.66
1997-98	638.5	63.7	–	40.9	467.3	56.8	31.0	6.64
1998-99	640.3	64.5	66.6	41.4	460.4	58.5	30.8	6.70

[1] After adjusting for non-interest-bearing liabilities. Definition of fixed debt may vary slightly from year to year to accommodate changes in the debt structure.

[2] Comparative figures for prior years not available.

Note : Variances in the maturity structure of the debt will cause the fixed ratio to vary modestly on a monthly basis.

Sources: *Public Accounts of Canada, Bank of Canada Review*, Department of Finance estimates.

Reference Table II

Government of Canada outstanding market debt[1]

	Payable in Canadian dollars					Payable in foreign currencies						
	Treasury bills	Marketable bonds	Retail debt	CPP bonds	Total	Marketable bonds	Canada Bills	Canada Notes[2]	Standby drawings	Terms loans	Total	Total market
					(millions of Canadian dollars)							
Fiscal years ending March 31												
1977-78	11,295	21,645	18,036	84	51,060	181	0	0	850	0	1,031	51,664
1978-79	13,535	26,988	19,443	96	60,062	3,319	0	0	2,782	1,115	7,216	66,640
1979-80	16,325	33,387	18,182	113	68,007	3,312	0	0	359	1,030	4,701	72,021
1980-81	21,770	40,976	15,966	136	78,848	3,236	0	0	355	1,046	4,637	83,138
1981-82	19,375	43,605	25,108	154	88,242	3,867	0	0	0	550	4,417	93,167
1982-83	29,125	48,473	32,753	171	110,522	4,872	0	0	0	362	5,234	116,562
1983-84	41,700	56,976	38,403	189	137,268	4,306	0	0	510	398	5,214	142,901
1984-85	52,300	69,354	42,167	205	164,026	4,972	0	0	1,909	1,172	8,053	172,719
1985-86	61,950	81,163	44,607	445	188,165	9,331	0	0	2,233	2,247	13,811	201,229
1986-87	76,950	94,520	43,854	1,796	217,120	9,120	1,045	0	0	2,047	12,212	228,611
1987-88	81,050	103,899	52,558	2,492	239,999	8,438	1,045	0	0	2,257	11,740	250,809
1988-89	102,700	115,748	47,048	3,005	268,501	6,672	1,131	0	0	934	8,737	276,301
1989-90	118,550	127,681	40,207	3,072	289,510	4,364	1,446	0	0	0	5,810	294,562
1990-91	139,150	143,601	33,782	3,492	320,025	3,555	1,008	0	0	0	4,563	323,903
1991-92	152,300	158,059	35,031	3,501	348,891	3,535	0	0	0	0	3,535	351,885
1992-93	162,050	178,436	33,884	3,505	377,875	2,926	2,552	0	0	0	5,478	382,741
1993-94	166,000	203,373	30,866	3,497	403,736	5,019	5,649	0	0	0	10,668	413,975
1994-95	164,450	225,513	30,756	3,488	424,207	7,875	9,046	0	0	0	16,921	440,998
1995-96	166,100	252,411	30,801	3,478	452,790	9,514	6,986	310	0	0	16,810	469,547
1996-97	135,400	282,059	32,911	3,468	453,838	12,460	8,436	2,121	0	0	23,017	476,852
1997-98	112,300	293,987	30,302	3,456	440,045	14,590	9,356	3,176	0	0	27,122	467,291
1998-99	96,950	294,914	28,810	4,063	424,737	19,655	10,171	6,182	0	0	36,008	460,427

[1] Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

[2] Includes EMTNs.

Sources: *Bank of Canada Review*, Department of Finance.

Reference Table III

Average weekly domestic market trading in Government of Canada securities, April 1998 to March 1999

		Marketable bonds					
	Treasury bills	3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	Total
	(millions of dollars)						
April 1998	30,104	32,633	32,488	14,470	263	79,855	109,958
May 1998	29,718	33,115	33,037	14,416	302	80,870	110,588
June 1998	28,527	40,501	46,409	12,487	253	99,650	128,177
July 1998	27,392	28,379	37,933	9,735	158	76,205	103,597
August 1998	32,936	36,532	46,830	14,638	279	98,279	131,215
September 1998	36,441	53,111	54,681	13,688	234	121,714	158,155
October 1998	25,646	31,225	46,076	14,299	175	91,775	117,421
November 1998	23,659	23,191	33,474	12,344	198	69,207	92,866
December 1998	25,048	19,569	25,578	7,733	175	53,055	78,103
January 1999	21,095	21,781	21,871	8,993	134	52,779	73,874
February 1999	21,213	23,068	29,938	10,329	148	63,483	84,696
March 1999	27,710	28,540	31,743	10,961	248	71,492	99,202

Source: *Bank of Canada Banking and Financial Statistics.*

Reference Table IV

Distribution of domestic holdings of Government of Canada securities

PART A – Treasury bills, Canada Bills, bonds[1] and Canada Savings Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
				(millions of dollars)					
1976	17,944	395	8,242	8,666	716	1,436	2,261	730	40,390
1977	20,302	306	10,268	9,601	1,048	2,271	3,104	1014	47,914
1978	22,736	418	12,001	9,896	1,537	3,738	4,006	1,721	56,053
1979	23,140	372	13,656	10,156	1,684	6,716	4,108	2,878	62,710
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,125	520	17,100	10,003	2,452	10,569	5,342	4,194	83,305
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,529	17,816	9,984	5,321	126,424
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,332	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,551
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,711	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207,250
1988	86,539	8,634	20,606	21,115	7,527	42,460	19,028	17,186	223,095
1989	84,650	11,402	21,133	19,804	9,853	46,037	23,850	17,840	234,569
1990	81,554	11,933	20,325	23,224	10,413	52,984	26,051	19,543	246,027
1991	75,304	11,655	22,370	35,792	12,069	55,846	33,054	21,015	267,105
1992	73,163	13,647	22,607	44,555	12,440	60,042	39,396	20,223	286,073
1993	63,843	10,359	23,498	60,242	11,073	69,930	45,077	16,397	300,419
1994	52,704	12,039	24,902	70,063	10,051	78,563	52,599	25,449	326,370
1995	47,737	11,974	23,590	76,560	10,900	87,284	58,955	24,742	341,742
1996	47,532	10,539	25,556	74,789	10,521	88,005	83,212	22,758	362,912
1997	36,037	12,028	27,198	67,715	7,359	95,875	80,028	24,534	350,774
1998	33,453	10,593	27,911	67,715	6,444	98,048	79,561	22,283	346,008

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART B – Treasury bills, Canada Bills, bonds[1] and Canada Savings Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(per cent)				
1976	44.43	0.98	20.41	21.46	1.77	3.56	5.60	1.81	100.00
1977	42.37	0.64	21.43	20.04	2.19	4.74	6.48	2.12	100.00
1978	40.56	0.75	21.41	17.65	2.74	6.67	7.15	3.07	100.00
1979	36.90	0.59	21.78	16.20	2.69	10.71	6.55	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.76	0.62	20.53	12.01	2.94	12.69	6.41	5.03	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.79	4.35	13.34	11.95	4.37	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.39	4.15	9.75	7.73	3.09	18.76	9.43	6.72	100.00
1988	38.79	3.87	9.24	9.46	3.37	19.03	8.53	7.70	100.00
1989	36.09	4.86	9.01	8.44	4.20	19.63	10.17	7.61	100.00
1990	33.15	4.85	8.26	9.44	4.23	21.54	10.59	7.94	100.00
1991	28.19	4.36	8.37	13.40	4.52	20.91	12.37	7.87	100.00
1992	25.57	4.77	7.90	15.57	4.35	20.99	13.77	7.07	100.00
1993	21.25	3.45	7.82	20.05	3.69	23.28	15.00	5.46	100.00
1994	16.15	3.69	7.63	21.47	3.08	24.07	16.12	7.80	100.00
1995	13.97	3.50	6.90	22.40	3.19	25.54	17.25	7.24	100.00
1996	13.10	2.90	7.04	20.61	2.90	24.25	22.93	6.27	100.00
1997	10.27	3.43	7.75	19.30	2.10	27.33	22.81	6.99	100.00
1998	9.67	3.06	8.07	19.57	1.86	28.34	22.99	6.44	100.00

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART C – Treasury bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
				(millions of dollars)					
1976	186	125	1,964	4,219	52	44	500	193	7,283
1977	413	121	2,461	4,949	143	98	1,016	311	9,512
1978	570	213	3,567	5,517	193	261	1,545	519	12,385
1979	797	163	4,345	6,690	65	245	1,540	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,158	2,587	5,376	1,286	36,793
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,712	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,246
1988	20,186	7,414	9,945	15,224	5,624	7,648	9,133	7,726	82,900
1989	32,639	9,668	11,124	16,410	8,115	7,664	12,408	9,251	107,279
1990	37,730	10,816	10,574	16,841	8,929	11,737	12,998	9,388	119,013
1991	32,321	10,483	13,093	24,382	9,080	10,386	17,636	10,417	127,798
1992	34,864	11,215	14,634	27,989	9,661	11,639	19,907	8,726	138,635
1993	29,561	9,657	16,876	29,901	9,097	17,050	22,336	5,151	139,629
1994	17,358	8,499	18,973	30,415	6,898	14,402	22,021	10,713	129,279
1995	14,306	9,204	18,298	30,865	7,645	15,422	25,183	10,078	131,001
1996	13,034	8,289	17,593	23,470	5,366	11,385	32,657	4,859	116,653
1997	39	8,535	14,233	19,448	3,261	9,557	33,402	4,388	92,863
1998	5	7,382	10,729	15,713	2,458	4,000	34,095	1,170	75,552

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART D – Treasury bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(per cent)				
1976	2.55	1.72	26.97	57.93	0.71	0.60	6.87	2.65	100.00
1977	4.34	1.27	25.87	52.03	1.50	1.03	10.68	3.27	100.00
1978	4.60	1.72	28.80	44.55	1.56	2.11	12.47	4.19	100.00
1979	5.43	1.11	29.58	45.55	0.44	1.67	10.48	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.24	13.99	7.05	35.00	8.58	7.03	14.61	3.50	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.58	10.44	13.98	16.60	5.38	6.94	13.85	7.22	100.00
1988	24.35	8.94	12.00	18.36	6.78	9.23	11.02	9.32	100.00
1989	30.42	9.01	10.37	15.30	7.56	7.14	11.57	8.62	100.00
1990	31.70	9.09	8.88	14.15	7.50	9.86	10.92	7.89	100.00
1991	25.29	8.20	10.25	19.08	7.10	8.13	13.80	8.15	100.00
1992	25.15	8.09	10.56	20.19	6.97	8.40	14.36	6.29	100.00
1993	21.17	6.92	12.09	21.41	6.52	12.21	16.00	3.69	100.00
1994	13.43	6.57	14.68	23.53	5.34	11.14	17.03	8.29	100.00
1995	10.92	7.03	13.97	23.56	5.84	11.77	19.22	7.69	100.00
1996	11.17	7.11	15.08	20.12	4.60	9.76	27.99	4.17	100.00
1997	0.04	9.19	15.33	20.94	3.51	10.29	35.97	4.73	100.00
1998	0.01	9.77	14.20	20.80	3.25	5.29	45.13	1.55	100.00

Reference Table IV *(cont'd)*
Distribution of domestic holdings of Government of Canada securities
PART E – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
				(millions of dollars)					
1976	1,274	270	6,278	4,447	664	1,392	1,761	537	16,623
1977	1,696	185	7,807	4,652	905	2,173	2,088	703	20,209
1978	1,931	205	8,434	4,379	1,344	3,477	2,461	1,202	23,433
1979	3,721	209	9,311	3,466	1,619	6,471	2,568	2,035	29,400
1980	4,890	267	10,541	2,502	2,152	8,814	3,130	2,736	35,032
1981	6,759	151	11,669	1,406	2,109	10,009	3,155	3,112	38,370
1982	7,374	337	12,945	1,199	1,931	11,907	4,169	3,455	43,317
1983	6,813	356	14,264	2,228	2,371	15,229	4,608	4,035	49,904
1984	9,906	508	13,669	2,167	2,095	20,163	5,434	4,668	58,610
1985	11,483	870	11,683	2,569	2,055	27,144	6,957	5,970	68,731
1986	9,827	1,384	10,407	2,618	2,568	31,295	8,250	7,877	74,226
1987	10,959	1,359	10,519	4,514	2,675	34,064	9,958	8,916	82,964
1988	11,476	1,220	10,661	5,891	1,903	34,812	9,895	9,460	85,318
1989	8,313	1,734	10,009	3,394	1,738	38,373	11,442	8,589	83,592
1990	8,306	1,117	9,751	6,383	1,484	41,247	13,053	10,155	91,496
1991	5,676	1,172	9,277	11,410	2,989	45,460	15,418	10,598	102,000
1992	2,417	2,432	7,973	16,566	2,779	48,403	19,489	11,497	111,556
1993	1,659	702	6,622	30,341	1,976	52,880	22,741	11,246	128,167
1994	1,834	3,540	5,929	39,648	3,153	64,161	30,578	14,736	163,579
1995	1,072	2,770	5,292	45,695	3,255	71,862	33,772	14,664	178,382
1996	108	2,250	7,963	51,319	5,155	76,620	50,555	17,899	211,869
1997	4,710	3,493	12,965	48,267	4,098	86,318	46,626	20,146	226,623
1998	5,118	3,211	17,182	52,002	3,986	94,048	45,466	21,113	242,126

Reference Table IV *(cont'd)*

Distribution of domestic holdings of Government of Canada securities

PART F – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(per cent)				
1976	7.66	1.62	37.77	26.75	3.99	8.37	10.59	3.23	100.00
1977	8.39	0.92	38.63	23.02	4.48	10.75	10.33	3.48	100.00
1978	8.24	0.87	35.99	18.69	5.74	14.84	10.50	5.13	100.00
1979	12.66	0.71	31.67	11.79	5.51	22.01	8.73	6.92	100.00
1980	13.96	0.76	30.09	7.14	6.14	25.16	8.93	7.81	100.00
1981	17.62	0.39	30.41	3.66	5.50	26.09	8.22	8.11	100.00
1982	17.02	0.78	29.88	2.77	4.46	27.49	9.62	7.98	100.00
1983	13.65	0.71	28.58	4.46	4.75	30.52	9.23	8.09	100.00
1984	16.90	0.87	23.32	3.70	3.57	34.40	9.27	7.96	100.00
1985	16.71	1.27	17.00	3.74	2.99	39.49	10.12	8.69	100.00
1986	13.24	1.86	14.02	3.53	3.46	42.16	11.11	10.61	100.00
1987	13.21	1.64	12.68	5.44	3.22	41.06	12.00	10.75	100.00
1988	13.45	1.43	12.50	6.90	2.23	40.80	11.60	11.09	100.00
1989	9.94	2.07	11.97	4.06	2.08	45.91	13.69	10.27	100.00
1990	9.08	1.22	10.66	6.98	1.62	45.08	14.27	11.10	100.00
1991	5.56	1.15	9.10	11.19	2.93	44.57	15.12	10.39	100.00
1992	2.17	2.18	7.15	14.85	2.49	43.39	17.47	10.31	100.00
1993	1.29	0.55	5.17	23.67	1.54	41.26	17.74	8.77	100.00
1994	1.12	2.16	3.62	24.24	1.93	39.22	18.69	9.01	100.00
1995	0.60	1.55	2.97	25.62	1.82	40.29	18.93	8.22	100.00
1996	0.05	1.06	3.76	24.22	2.43	36.16	23.86	8.45	100.00
1997	2.08	1.54	5.72	21.30	1.81	38.09	20.57	8.89	100.00
1998	2.11	1.33	7.10	21.48	1.65	38.84	18.78	8.72	100.00

Note: Because of timing and valuation differences, the *National Balance Sheet* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report is on a par value basis – that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

1 Includes bonds denominated in foreign currencies.

2 Includes Quebec savings banks, credit unions and caisses populaires, trust companies and mortgage loan companies.

3 Includes investment dealers, mutual funds, property and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

4 Includes federal government holdings of its own debt, as well as provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

5 May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts.*

Reference Table V

Non-resident holdings of Government of Canada debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada Bills	Total	Total as per cent of total market debt
	(billions of Canadian dollars)			
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	8.7
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.6
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.0
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.5
1987	30.3	4.7	35.0	15.3
1988	33.0	9.3	42.3	16.9
1989	41.3	15.7	57.0	20.6
1990	49.9	13.3	63.2	21.5
1991	57.6	16.1	73.7	22.8
1992	63.6	23.0	86.6	24.6
1993	80.9	24.8	105.7	27.6
1994	79.3	34.0	113.3	27.4
1995	73.6	39.2	112.8	25.6
1996	84.1	37.7	121.8	25.9
1997	91.4	28.8	120.1	25.2
1998	92.9	22.4	115.3	24.7
1999	85.3	21.9	107.1	23.3

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities.*

Numbers may not add due to rounding.

Reference Table VI

Fiscal 1998-99 Treasury bill program

	Maturing					New issues					Net increment			Average tender yields			
Date	CMB	3 mo	6 mo	12 mo	Total	CMB	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S	CMB	3 mo	6 mo	12 mo
	(millions of dollars)													(per cent)			
2-Apr-98	5,000	3,400	0	2,300	10,700	0	3,700	1,900	1,700	7,300	-3,400	-3,400	108,900		4.57	4.71	4.93
9-Apr-98	0	0	0	0	0	0	0	0	0	0	0	-3,400	108,900		–	–	–
16-Apr-98	2,500	4,000	4,000	2,300	12,800	3,000	3,600	1,800	1,600	10,000	-2,800	-6,200	106,100	4.62	4.55	4.73	4.94
23-Apr-98	0	0	0	0	0	1,500	0	0	0	1,500	1,500	-4,700	107,600	4.76	–	–	–
30-Apr-98	0	4,000	0	2,200	6,200	0	3,500	1,700	1,500	6,700	500	-4,200	108,100		4.83	4.97	5.12
7-May-98	4,500	0	0	0	4,500	0	0	0	0	0	-4,500	-8,700	103,600		–	–	–
14-May-98	0	4,200	4,200	2,100	10,500	0	3,200	1,600	1,400	6,200	-4,300	-13,000	99,300		4.74	4.97	5.17
21-May-98	0	0	0	0	0	0	0	0	0	0	0	-13,000	99,300		–	–	–
28-May-98	0	4,000	0	2,100	6,100	0	3,200	1,500	1,300	6,000	-100	-13,100	99,200		4.75	4.97	5.16
4-Jun-98	0	0	0	0	0	0	0	0	0	0	0	-13,100	99,200		–	–	–
11-Jun-98	0	4,200	3,800	2,100	10,100	0	3,200	1,500	1,300	6,000	-4,100	-17,200	95,100		4.68	4.93	5.15
18-Jun-98	0	0	0	0	0	0	0	0	0	0	0	-17,200	95,100		–	–	–
25-Jun-98	0	4,200	0	2,200	6,400	0	3,200	1,500	1,300	6,000	-400	-17,600	94,700		4.88	5.07	5.24
2-Jul-98	0	0	0	0	0	0	0	0	0	0	0	-17,600	94,700		–	–	–
9-Jul-98	0	3,700	4,200	2,100	10,000	0	3,300	1,500	1,400	6,200	-3,800	-21,400	90,900		4.80	4.93	5.16
16-Jul-98	0	0	0	0	0	0	0	0	0	0	0	-21,400	90,900		–	–	–
23-Jul-98	0	3,600	0	2,100	5,700	0	3,300	1,600	1,500	6,400	700	-20,700	91,600		4.93	5.07	5.25
30-Jul-98	0	0	0	0	0	0	0	0	0	0	0	-20,700	91,600		–	–	–
6-Aug-98	500	3,500	4,300	2,000	10,300	0	3,400	1,600	1,600	6,600	-3,700	-24,400	87,900		5.07	5.21	5.33
13-Aug-98	0	0	0	0	0	0	0	0	0	0	0	-24,400	87,900		–	–	–
20-Aug-98	0	3,200	0	2,000	5,200	0	3,500	1,700	1,600	6,800	1,600	-22,800	89,500		4.88	5.17	5.36
27-Aug-98	0	0	0	0	0	0	0	0	0	0	0	-22,800	89,500		–	–	–
3-Sep-98	0	3,200	4,200	2,000	9,400	0	3,400	1,600	1,500	6,500	-2,900	-25,700	86,600		5.64	5.81	5.83
10-Sep-98	0	0	0	0	0	0	0	0	0	0	0	-25,700	86,600		–	–	–
17-Sep-98	0	3,200	0	3,700	6,900	0	3,200	1,600	1,400	6,200	-700	-26,400	85,900		5.15	5.17	5.25
24-Sep-98	0	0	0	0	0	0	0	0	0	0	0	-26,400	85,900		–	–	–
1-Oct-98	0	3,200	3,700	0	6,900	0	3,100	1,500	1,400	6,000	-900	-27,300	85,000		4.94	5.07	5.04
8-Oct-98	0	0	0	0	0	0	0	0	0	0	0	-27,300	85,000		–	–	–
15-Oct-98	0	3,300	0	3,800	7,100	0	3,300	1,500	1,400	6,200	-900	-28,200	84,100		4.67	4.86	4.78
22-Oct-98	0	0	0	0	0	3,000	0	0	0	3,000	3,000	-25,200	87,100	5.03	–	–	–
29-Oct-98	0	3,300	3,300	0	6,600	0	3,300	1,500	1,400	6,200	-400	-25,600	86,700		4.74	4.79	4.74
5-Nov-98	0	0	0	0	0	1,000	0	0	0	1,000	1,000	-24,600	87,700	4.96	–	–	–
12-Nov-98	0	3,400	0	3,800	7,200	0	3,300	1,500	1,400	6,200	-1,000	-25,600	86,700		4.86	4.96	4.93
19-Nov-98	0	0	0	0	0	0	0	0	0	0	0	-25,600	86,700		–	–	–
26-Nov-98	3,000	3,500	3,000	0	9,500	3,000	3,100	1,500	1,400	9,000	-500	-26,100	86,200	4.82	4.82	4.93	4.97
3-Dec-98	0	0	0	0	0	2,500	0	0	0	2,500	2,500	-23,600	88,700	4.85	–	–	–
10-Dec-98	1,000	3,400	0	3,400	7,800	0	3,300	1,500	1,400	6,200	-1,600	-25,200	87,100		4.69	4.79	4.84
17-Dec-98	0	0	0	0	0	0	0	0	0	0	0	-25,200	87,100		–	–	–

Reference Table VI *(cont'd)*
Fiscal 1998-99 Treasury bill program

	Maturing					New issues					Net increment			Average tender yields			
Date	CMB	3 mo	6 mo	12 mo	Total	CMB	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S	CMB	3 mo	6 mo	12 mo
	(millions of dollars)													(per cent)			
23-Dec-98	0	3,200	3,000	0	6,200	0	3,300	1,500	1,400	6,200	0	-25,200	87,100		4.70	4.76	4.83
31-Dec-98	0	0	0	0	0	0	0	0	0	0	0	-25,200	87,100		–	–	–
7-Jan-99	5,500	3,100	0	3,800	12,400	0	3,600	1,500	1,500	6,600	-5,800	-31,000	81,300		4.61	4.71	4.71
14-Jan-99	0	0	0	0	0	0	0	0	0	0	0	-31,000	81,300		–	–	–
21-Jan-99	0	3,300	3,200	0	6,500	0	3,800	1,600	1,600	7,000	500	-30,500	81,800		4.66	4.77	4.86
28-Jan-99	0	0	0	0	0	2,000	0	0	0	2,000	2,000	-28,500	83,800	5.02	–	–	–
4-Feb-99	2,000	3,300	0	3,800	9,100	0	4,000	1,800	1,700	7,500	-1,600	-30,100	82,200		4.74	4.85	4.90
11-Feb-99	0	0	0	0	0	0	0	0	0	0	0	-30,100	82,200		–	–	–
18-Feb-99	0	3,300	3,300	0	6,600	0	4,200	1,900	1,800	7,900	1,300	-28,800	83,500		4.84	4.93	5.01
25-Feb-99	0	0	0	0	0	2,500	0	0	0	2,500	2,500	-26,300	86,000	4.93	–	–	–
4-Mar-99	0	3,100	0	3,800	6,900	2,500	4,400	2,100	2,000	11,000	4,100	-22,200	90,100	4.97	4.99	5.08	5.23
11-Mar-99	0	0	0	0	0	1,750	0	0	0	1,750	1,750	-20,450	91,850	4.98	–	–	–
18-Mar-99	0	3,300	3,100	0	6,400	2,500	4,400	2,100	2,000	11,000	4,600	-15,850	96,450	4.97	4.89	4.98	5.07
25-Mar-99	0	0	0	0	0	500	0	0	0	500	500	-15,350	96,950	4.97	–	–	–
Total	**24,000**	**91,100**	**47,300**	**51,600**	**214,000**	**25,750**	**90,800**	**42,600**	**39,500**	**198,650**	**-15,350**	**–**	**96,950**		**–**	**–**	**–**

Source: Bank of Canada.

Reference Table VII

Fiscal 1998-99 Canadian-dollar marketable bond program

Offering date	Delivery date	Maturity date	Maturing	Gross	Net
			(millions of dollars)		
Fixed-coupon bonds					
1998	**1997**				
April 22	May 1	June 1, 2029		1,600	1,600
May 6	May 15	June 1, 2008		2,300	2,300
May 27	June 1	September 1, 2003		2,400	2,400
June 10	June 15	December 1, 2000		3,500	3,500
August 12	August 17	June 1, 2009		2,300	2,300
August 26	September 1	September 1, 2003	6,800	2,400	-4,400
September 9	September 15	December 1, 2000	6,000	3,500	-2,500
—	October 1*	—	3,100	0	-3,100
October 28	November 2	June1, 2029	5,100	1,700	-3,400
November 4	November 16	June 1, 2009		2,300	2,300
November 25	December 1	September 1, 2003	2,275	2,500	225
December 1	December 4	—		-500**	-500
December 9	December 15	June 1, 2001		3,500	3,500
1999	**1999**				
February 10	February 15	June 1, 2009		2,300	2,300
February 11	February 16	—		-500**	-500
February 24	March 1	September 1, 2004	6,700	2,500	-4,200
March 10	March 15	June 1, 2001	6,000	3,500	-2,500
Real return bonds					
1998	**1998**				
June 3	June 8	December 1, 2026		400	400
September 2	September 8	December 1, 2026		400	400
December 2	December 7	December 1, 2026		400	400
1999	**1999**				
March 3	March 8	December 1, 2031		400	400
Total fiscal year 1998-99			**35,975**	**36,900**	**925**

* Maturing date
** Bond repurchase

Source: Bank of Canada.

Reference Table VIII

Outstanding Government of Canada Canadian-dollar marketable bonds as at March 31, 1999

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	(millions of dollars)	(per cent)		(millions of dollars)	(per cent)
Fixed-coupon					
01-Aug-1999	5,600.0	6.50	01-Feb-2002	213.0	8.75
01-Sep-1999	8,500.0	7.75	15-Mar-2002	350.0	15.50
15-Sep-1999	7,000.0	4.75	01-Apr-2002	5,450.0	8.50
15-Oct-1999	527.5	9.00	01-May-2002	1,850.0	10.00
01-Dec-1999	2,825.0	9.25	01-Sep-2002	10,200.0	5.50
01-Dec-1999	400.0	13.50	15-Dec-2002	1,439.7	11.25
01-Feb-2000	5,500.0	5.50	01-Feb-2003	2,626.7	11.75
01-Mar-2000	6,500.0	8.50	01-Jun-2003	6,900.0	7.25
15-Mar-2000	7,000.0	5.00	01-Sep-2003	9,700.0	5.25
15-Mar-2000	1,050.0	13.75	01-Oct-2003	644.7	9.50
01-May-2000	1,575.0	9.75	01-Dec-2003	8,800.0	7.50
01-Jul-2000	2,900.0	10.50	01-Feb-2004	1,985.4	10.25
01-Jul-2000	175.0	15.00	01-Jun-2004	7,900.0	6.50
01-Sep-2000	7,600.0	7.50	01-Jun-2004	549.0	13.50
01-Sep-2000	1,200.0	11.50	01-Sep-2004	2,500.0	5.00
01-Dec-2000	7,000.0	5.00	01-Oct-2004	875.0	10.50
15-Dec-2000	500.0	9.75	01-Dec-2004	7,700.0	9.00
01-Feb-2001	425.0	15.75	01-Mar-2005	1,775.0	12.00
01-Mar-2001	9,400.0	7.50	01-Sep-2005	1,375.0	12.25
01-Mar-2001	3,175.0	10.50	01-Dec-2005	8,000.0	8.75
01-May-2001	1,325.0	13.00	01-Mar-2006	975.0	12.50
01-Jun-2001	7,000.0	4.50	01-Oct-2006	1,025.0	14.00
01-Jun-2001	3,550.0	9.75	01-Dec-2006	9,100.0	7.00
01-Sep-2001	10,600.0	7.00	01-Mar-2007	325.0	13.75
01-Oct-2001	1,232.8	9.50	01-Jun-2007	9,500.0	7.25
01-Dec-2001	3,850.0	9.75	01-Oct-2007	700.0	13.00

Reference Table VIII *(cont'd)*

Outstanding Government of Canada Canadian-dollar marketable bonds as at March 31, 1999

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	(millions of dollars)	(per cent)		(millions of dollars)	(per cent)
Fixed-coupon			**Real return bonds**		
01-Mar-2008	750.0	12.75	01-Dec-2021	5,175.0	4.25
01-Jun-2008	9,200.0	6.00	01-Dec-2026	5,250.0	4.25
01-Jun-2008	3,257.9	10.00	01-Dec-2031	400.0	4.00
01-Oct-2008	644.8	11.75	**Total**[1]	**10.8**	
01-Mar-2009	400.0	11.50			
01-Jun-2009	6,900.0	5.50			
01-Jun-2009	868.3	11.00			
01-Oct-2009	1,224.1	10.75			
01-Mar-2010	325.0	9.75			
01-Jun-2010	2,880.0	9.50			
01-Oct-2010	325.0	8.75			
01-Mar-2011	1,975.0	9.00			
01-Jun-2011	750.0	8.50			
15-Mar-2014	3,150.0	10.25			
15-Jun-2015	2,350.0	11.25			
15-Mar-2021	1,800.0	10.50			
01-Jun-2021	4,650.0	9.75			
01-Jun-2022	2,550.0	9.25			
01-Jun-2023	8,200.0	8.00			
01-Jun-2025	8,900.0	9.00			
01-Jun-2027	9,600.0	8.00			
01-Jun-2029	4,500.0	5.75			
Total	**284.1**				

[1] Real return bond figures show gross issue amount only – the CPI adjustment is not shown here.

Source: Bank of Canada.

Reference Table IX

Government of Canada swaps outstanding as at March 31, 1999

Domestic interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(per cent)	(millions of dollars)
01-Sep-99	7.75	100
01-Mar-00	8.50	400
01-Jun-01	9.75	250
01-Feb-04	10.25	50
Total		**800**

Foreign interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(per cent)	(millions of US dollars)
22-Jan-02	5.125	300
19-Nov-07	4.0	25
5-Nov-08	5.25	500
5-Nov-08	5.25	500
5-Nov-08	5.25	200
5-Nov-08	5.25	200
Total		**1,525**

Foreign cross-currency swaps

Maturity date	Notional amount
	(millions of US dollars)
09-Feb-00	26
02-Oct-00	3
02-Oct-00	3
02-Oct-00	3
02-Oct-00	3
02-Oct-00	3
02-Oct-00	3
12-Jun-01	26
16-Jul-03	65
26-Nov-04	495
26-Nov-04	341
30-Nov-04	63
30-Nov-04	25
22-Dec-04	76
03-Oct-07	319
31-Jan-08	44
Total	**1,498**

Domestic cross-currency swaps

Maturity date	Notional amount
	(millions of U.S. dollars)
01-Mar-00	286
04-Sep-01	1,000
01-Apr-02	50
01-May-02	100
01-Sep-02	1,000
03-Sep-02	250
15-Dec-02	600
01-Jun-03	75
01-Sep-03	150
01-Oct-03	65
01-Dec-03	520
01-Feb-04	525
30-Mar-04	100
01-Jun-04	250
01-Oct-04	50
23-Nov-04	100
01-Mar-05	565
01-Sep-05	100
23-Nov-05	150
01-Dec-05	650
01-Oct-06	100
30-Oct-06	250
23-Nov-06	150
01-Jun-07	750
01-Mar-08	475
01-Jun-08	800
30-Sep-08	50
01-Oct-08	190
01-Mar-09	535
01-Jun-09	120
Total	**10,006**

[1] Refers to the coupon of the underlying bond that was swapped.

Source: Bank of Canada

Reference Table X
Canada Savings Bonds, fiscal 1982-83 to fiscal 1998-99

Fiscal year	Gross sales during campaign[1]	Net sales during campaign[1]	Outstanding at fiscal year end[2]
		(millions of dollars)	
1982-83	11,229	9,567	32,753
1983-84	11,584	8,761	38,403
1984-85	12,743	9,768	42,167
1985-86	15,107	10,157	44,607
1986-87	9,191	5,177	43,854
1987-88	17,450	14,913	52,558
1988-89	14,962	6,454	47,048
1989-90	9,338	3,121	40,207
1990-91	6,720	1,660	33,781
1991-92	9,588	4,733	35,031
1992-93	9,235	3,275	33,884
1993-94	5,364	842	30,866
1994-95	7,506	5,709	30,756
1995-96	4,612	3,352	30,801
1996-97[3]	5,747	4,404	32,911
1997-98[3]	4,951	-57	30,302
1998-99[3]	4,977	-157	28,810

[1] The figures shown are for the CSB campaign period, not the entire fiscal period; net sales are gross sales less redemptions during the period.

[2] Figures are in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods (figures in main text of DMR are shown on Public Accounts basis).

[3] Includes sales and redemptions of Canada Premium Bonds.

Sources: Department of Finance, *Bank of Canada Review.*

Reference Table XI

Crown corporation borrowings as at March 31

Borrowings from the market

Corporation	1991	1992	1993	1994	1995	1996	1997	1998	1999
				(millions of dollars)					
Export Development Corporation	5,685	6,220	6,983	7,793	7,515	7,673	7,820	10,077	12,967
Canadian Wheat Board	6,449	7,323	6,966	7,283	7,321	6,377	6,474	6,698	6,786
Business Development Bank of Canada	2,271	2,249	2,352	2,602	2,723	3,045	3,371	3,839	4,223
Farm Credit Corporation	1,128	813	797	863	990	1,582	1,926	3,026	4,317
CN[1]	1,861	1,803	1,905	2,249	2,331	–	–	–	–
Canada Mortgage and Housing Corporation	–	96	152	1,573	3,630	5,906	7,866	9,934	10,633
Canada Development Investment Corporation	612	713	594	473	–	–	–	–	–
Petro-Canada Ltd.	1,656	980	455	501	504	490	432	443	471
Petro-Canada[1]	718	–	–	–	–	–	–	–	–
Canada Ports Corporation	–	200	188	–	–	–	–	–	79
Other	98	96	97	239	235	297	226	262	222
Total	**20,478**	**20,493**	**20,489**	**23,576**	**25,249**	**25,370**	**28,115**	**34,279**	**39,698**

[1] No longer a Crown corporation.

Source: *Public Accounts of Canada.*

Borrowings from the Consolidated Revenue Fund

Corporation	1991	1992	1993	1994	1995	1996	1997	1998	1999
				(millions of dollars)					
Canada Mortgage and Housing Corporation	8,484	8,419	8,181	8,075	7,835	7,263	6,938	6,708	6,298
Canada Deposit Insurance Corporation	1,225	1,785	3,085	3,151	2,160	1,627	855	395	–
Farm Credit Corporation	2,432	2,491	2,420	2,488	2,524	2,310	2,507	1,877	1,041
Other	934	975	819	415	307	233	204	179	551
Total	**13,075**	**13,670**	**14,505**	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**	**7,890**

Note: Figures do not include "allowance for valuation."

Source: Public Works and Government Services Canada data.

Debt Management Report

1999–2000

Canadä

Debt Management Report

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Ministère des Finances Canada

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Table of Contents

Foreword by the Minister of Finance

The federal government registered a budgetary surplus of $12.3 billion in 1999-2000, the largest ever recorded by the Government. This is also the third consecutive year the Government has recorded a budgetary surplus.

These surpluses, resulting from continued restraint on the spending side and strong economic growth, have allowed the Government to reduce the net public debt by almost $19 billion over the last three years. Net public debt currently stands at $564.5 billion and now represents 58.9 per cent of gross domestic product (GDP) compared to 71.2 per cent in 1995-96. After more than a quarter of a century of deficits, all Canadians can take pride in this remarkable fiscal turnaround.

Yet the fact remains that servicing the debt is the largest spending program of the federal government. For every dollar of revenue it collects, the federal government spends 25 cents to pay interest on the public debt. Although this is a big improvement over the 36 cents the Government was paying in 1996, debt servicing costs still limit the Government's ability to address other priorities such as health care, education and lower taxes.

That is why the *Debt Management Report* is so important. It provides a detailed account of the federal government's debt operations, including the composition of the debt, its distribution, and the mechanisms and activities through which it is prudently managed in the interests of Canadians. This edition of the report, for example, provides details on a number of specific measures aimed at continuing the Government's efforts to maintain transparency, liquidity and efficiency in the market for Government of Canada securities in a declining debt environment and to improve its treasury operations.

Timely and transparent information of this kind enables Canadians to hold the Government accountable for its actions and decisions. It was in this spirit that this Government amended the Financial Administration Act last year, making it mandatory that the *Debt Management Report* be tabled in Parliament every year shortly after the tabling of the Public Accounts of Canada – the Government's financial statements.

The Government remains fully committed to managing the debt prudently to provide stable, low-cost financing for the programs that Canadians value. Continued diligence in the management of public finances is a key plank in the Government's strategy to sustain economic growth so that Canadians can have more jobs, higher incomes and a better quality of life.

The Honourable Paul Martin, P.C., M.P.
Minister of Finance
Ottawa, December 2000

Highlights of 1999-2000

The federal government recorded a third consecutive budgetary surplus in 1999-2000.

- In 1999-2000, the federal government recorded a budgetary surplus of $12.3 billion after surpluses of $3.5 billion in 1997-98 and $2.9 billion in 1998-99.
- Net public debt has declined by $18.7 billion from its peak in 1996-97 to stand at $564.5 billion. At year-end 1999-2000, it stood at 58.9 per cent of GDP, down from its peak of 71.2 per cent in 1995-96.
- The Government spent about 25 cents of every dollar of revenue in 1999-2000 to pay the interest on the public debt. The cost of servicing the debt underscores the importance of prudent debt management.

Net debt and market debt retirements continued.

- As of March 31, 2000, the federal government's market debt totalled $456.4 billion (see Table 1). During 1999-2000, the federal government retired $4.0 billion of its market debt. Since 1997-98 the Government has retired $20.4 billion of market debt.

Table 1
1999-2000 Market Debt Program

	March 31, 1999	Net new issuance	March 31, 2000
		(C$ billions)	
Domestic debt	420.4	-0.1	420.3
Foreign debt	36.0	-3.4	32.6
Canada Pension Plan bonds	4.1	-0.5	3.6
Total market debt	**460.4**	**-4.0**	**456.4**

Note: Numbers may not add due to rounding.
Source: *Public Accounts of Canada*.

A prudent debt structure was maintained.

- The Government maintained the fixed-rate share of the debt stock at two-thirds of total interest-bearing debt. A prudent debt structure protects the Government's fiscal position from unexpected increases in interest rates and limits refinancing risk.
  - Improved sensitivity analysis suggests that this structure provides assurance that the direct impact of most interest rate shocks on the fiscal balance would be contained within the budget framework with a high degree of certainty.

The Government took further steps to support a liquid and efficient market.

- Continuing its efforts to maintain transparency, liquidity and efficiency in the market for Government of Canada securities in a declining debt environment and to improve its treasury operations, the Government took a number of further steps in 1999-2000, including:
  - the bond buyback program was implemented on an ongoing basis, contributing to the maintenance of primary bond market liquidity;
  - a market proposal to remove the ceiling on the reconstitution of government securities was reviewed and approved in June 2000; and
  - a new framework for the investment of the Government's cash balances aimed at broadening participation by investors and enhancing risk management was developed and subsequently published for comment in July 2000.

Debt Management Environment

Fiscal Developments in 1999-2000

The federal government recorded a budgetary surplus of $12.3 billion in 1999-2000.

In 1993-94, the federal deficit stood at $42 billion. The actions taken in the 1994, 1995 and 1996 budgets, coupled with sustained economic growth, resulted in the elimination of the deficit in just four years. In 1997-98, a budgetary surplus of $3.5 billion was recorded, the first surplus in 28 years. This was followed by surpluses of $2.9 billion in 1998-99 and $12.3 billion in 1999-2000.

The 1999-2000 budgetary surplus of $12.3 billion, combined with a net source of funds from non-budgetary transactions of $2.3 billion, produced a financial source (excluding foreign exchange transactions) of $14.6 billion, following a financial source of $11.5 billion in 1998-99. The results for 1999-2000 marked the fourth consecutive year that the federal government recorded a financial source (excluding foreign exchange transactions). Including foreign exchange transactions, primarily relating to supplementing foreign exchange reserves, the net financial source was $7.7 billion for 1999-2000.

Financial requirements/source is a measure of the Government's financial position that is broadly comparable to the measure of budgetary balance used by other major industrialized countries, including the United States. On this basis, Canada is the only Group of Seven (G-7) country to report a financial source for four consecutive years.

The Budgetary Surplus and Financial Source

	($ billions)
Budgetary surplus	12.3
Net source of funds from non-budgetary transactions	2.3
Financial source (excluding foreign exchange transactions)	14.6
Net requirement of funds from foreign exchange transactions	(6.8)
Net financial source	7.7

The budgetary balance is presented on a modified accrual basis of accounting, recording government liabilities when they are incurred, regardless of when the cash payment is made.

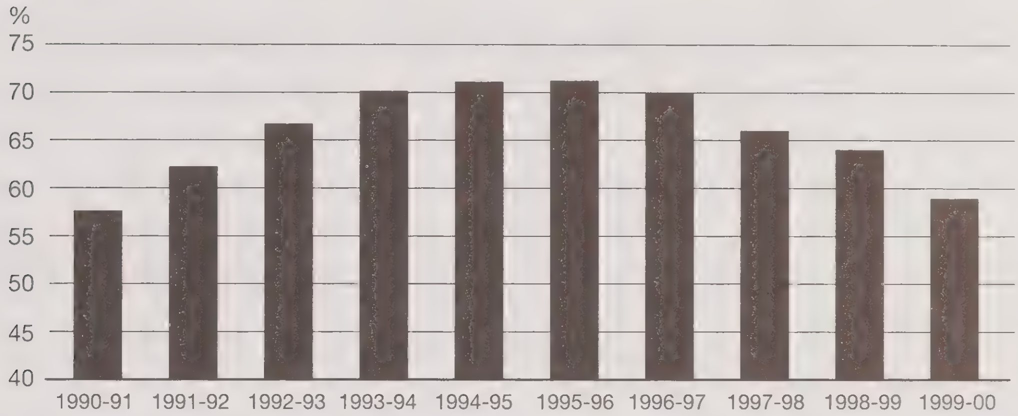
In contrast, financial requirements/source measures the difference between cash coming in to the Government and cash going out. It differs from the budgetary balance in that it includes transactions in loans, investments and advances, federal employees' pension accounts, other specified purpose accounts and changes in other financial assets and liabilities. These activities are included as part of non-budgetary transactions.

Note: Numbers do not add due to rounding.

The 1999-2000 budgetary surplus brings the net public debt, as a share of GDP, down to 58.9 per cent.

The budgetary surplus of $12.3 billion recorded in 1999-2000 brings the federal government's net public debt down to $564.5 billion. As a share of GDP, the net public debt dropped to 58.9 per cent from a peak of 71.2 per cent in 1995-96. This ratio is generally recognized as the most appropriate indicator of the debt burden as it measures debt relative to the ability of the Government and the country's taxpayers to finance it. In 1999-2000 alone the net debt-to-GDP ratio declined by 5.1 percentage points, the largest drop since 1948-49. This is the fourth consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1990-91 (see Chart 1).

Chart 1
Net Debt-to-GDP Ratio



Source: Department of Finance.

Market Developments in 1999-2000

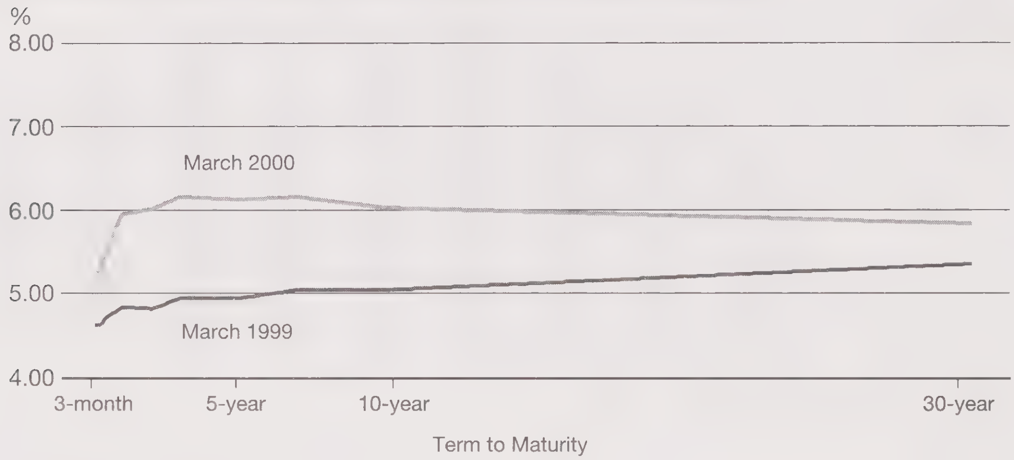
The financial market environment was positive in 1999-2000.

The overall financial market environment was much more stable in 1999-2000 than in 1998-99, a period marked by considerable international uncertainty related to the Asian financial crisis, the Russian debt default and losses at a number of large international investment ("hedge") funds. In Canada, economic growth remained very healthy through 1999-2000, the Canadian dollar rebounded from its record lows of the previous year and inflation remained well within the 1 to 3 per cent target range. Short-term interest rates rose through the latter part of the year as monetary policy became less accommodative as the economy began to approach its estimated capacity. The Bank of Canada raised the target rate for overnight loans three times from 4.5 per cent in November 1999 to 5.25 per cent in March 2000. Short-term interest rates in the United States were increasing over the same period (see Chart 3).

Interest rates rose modestly over the year, in line with a tightening of monetary conditions.

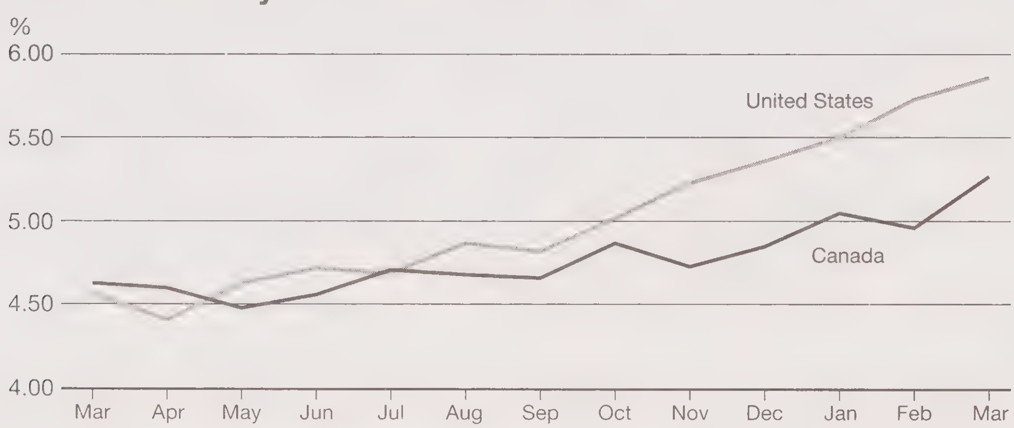
Government yield curves (i.e. the structure of interest rates from short term to long term) in both countries were in the unusual situation of being “inverted” or downward sloping for much of the latter part of the year (for Canada, see Chart 2). This reflected a number of factors, including expectations regarding the direction of monetary policy, concerns about reductions in the supply of government securities in an environment of budgetary surpluses, especially at longer terms to maturity, as well as a high degree of confidence in long-term inflation performance. Canadian interest rates were generally below U.S. interest rates for most of the year (see Charts 3, 4 and 5). Longer-term interest rates increased in both Canada and the United States for most of the year although they began to decline around January 2000 (see Charts 4 and 5).

Chart 2
Canada Yield Curve – March 1999 and March 2000



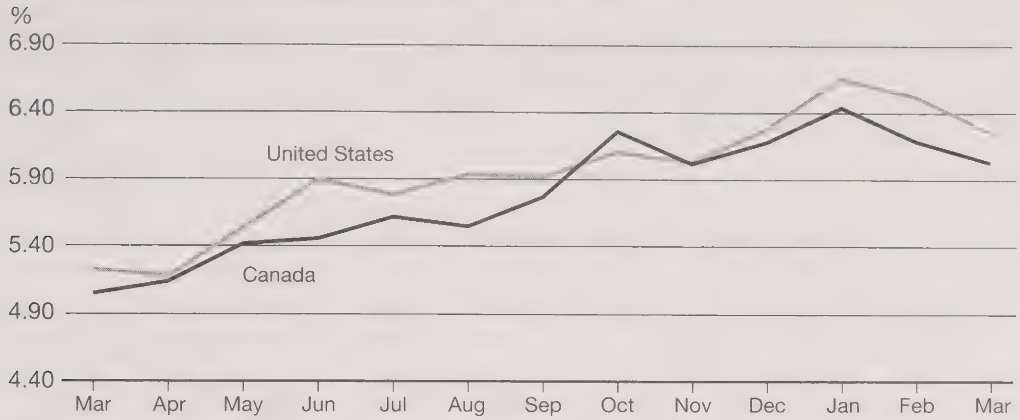
Source: Bank of Canada.

Chart 3
3-Month Treasury Bill Rates – 1999-2000



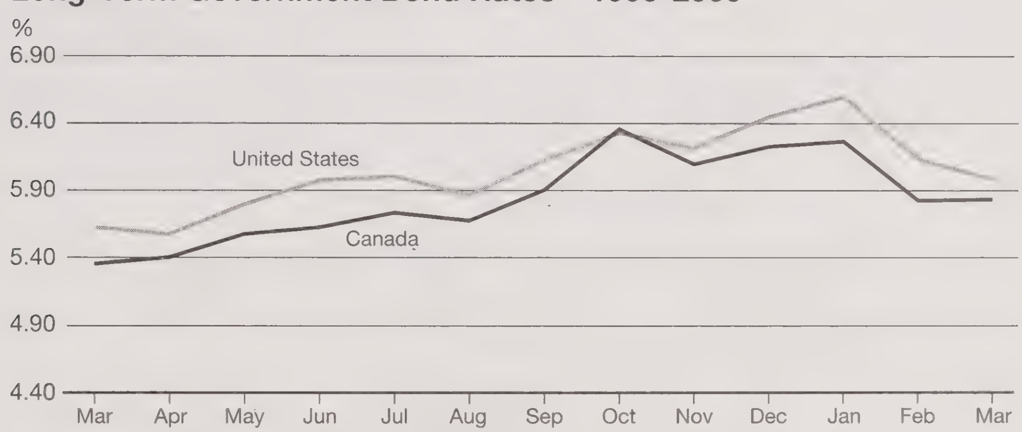
Sources: Bank of Canada and Federal Reserve Board.

Chart 4
10-Year Government Bond Rates – 1999-2000



Sources: Bank of Canada and Federal Reserve Board.

Chart 5
Long-Term Government Bond Rates – 1999-2000



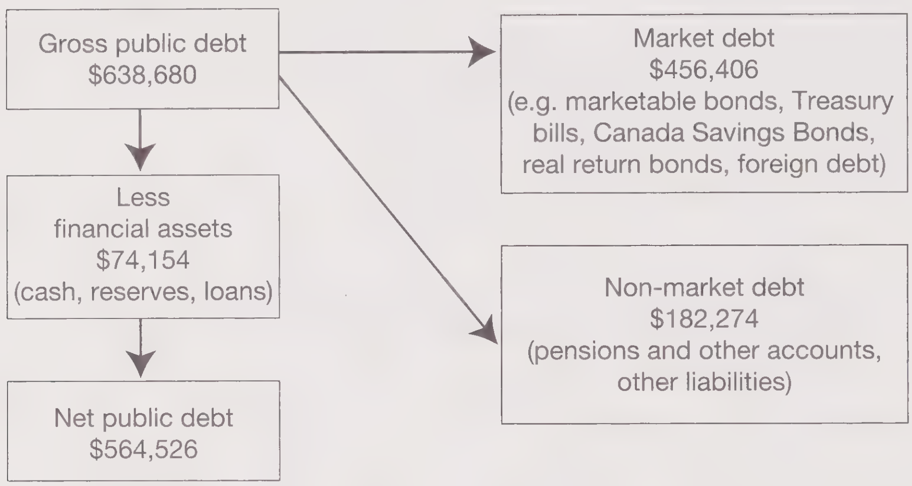
Sources: Bank of Canada and Federal Reserve Board.

Composition of the Federal Debt

Net public debt has declined by $18.7 billion over the past three years.

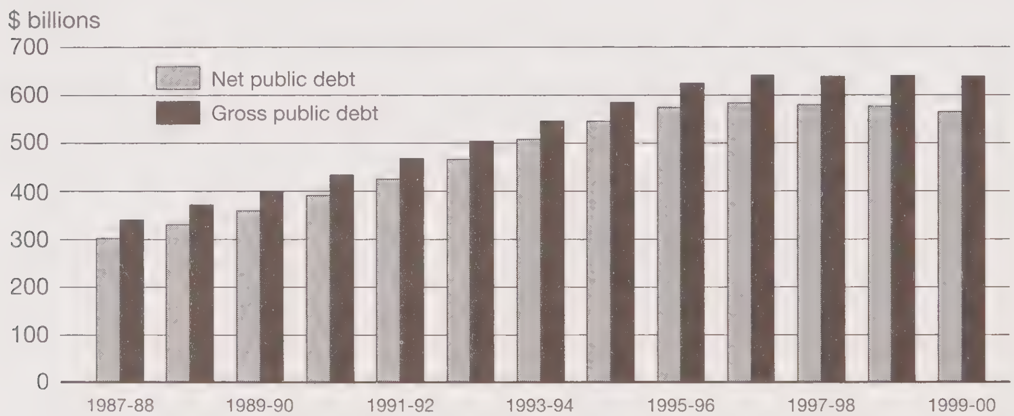
The 1999-2000 budgetary surplus brought the federal government's net public debt – gross public debt net of the Government's financial assets (primarily cash and international reserves) – down to $564.5 billion from $576.8 billion in 1998-99 (see Chart 6). Net public debt has declined by $18.7 billion from its peak in 1996-97.

Total Public Debt as at March 31, 2000
($ millions)



Source: *Public Accounts of Canada.*

Chart 6
Gross and Net Public Debt



Source: *Public Accounts of Canada.*

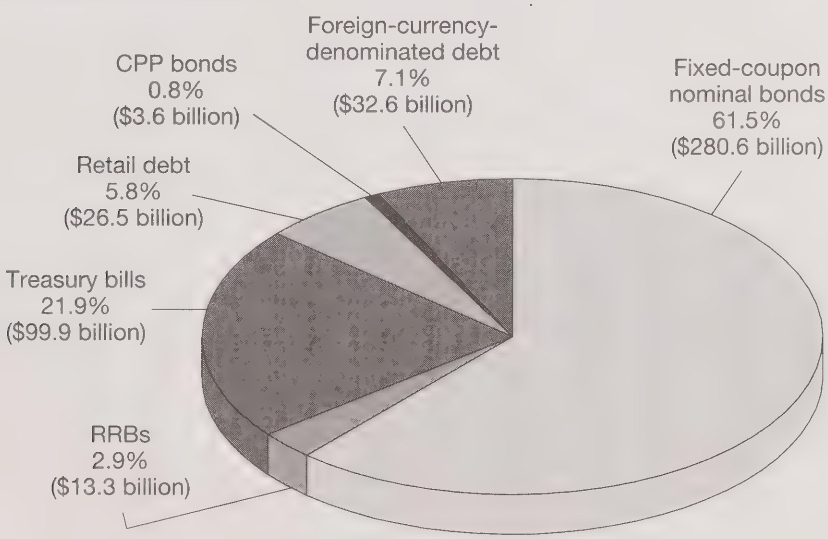
Market debt has declined by $20.4 billion over the past three years.

Gross public debt at the end of March 2000 totalled $638.7 billion. Gross public debt is made up of two major components: market debt and non-market debt. Market debt is the portion of debt that is funded in the public markets. It consists of marketable bonds, Treasury bills, Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), foreign-currency-denominated bonds and bills, and bonds issued by the federal government to the Canada Pension Plan (CPP). At March 31, 2000, market debt outstanding was $456.4 billion. In 1999-2000, the level of market debt declined by $4 billion. Over the past three fiscal years, $20.4 billion of market debt has been retired. Non-market debt consists of past federal public sector pension liabilities, which are not funded in the public markets, and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt). At March 31, 2000, non-market debt totalled $182.3 billion.

At March 31, 2000, outstanding market debt comprised $280.6 billion of fixed-coupon nominal bonds, $13.3 billion of real return bonds (RRBs), $99.9 billion of Treasury bills, $26.5 billion of CSBs and CPBs, $3.6 billion of CPP bonds and $32.6 billion of foreign-currency-denominated securities (see Chart 7). In addition, the Government had $2.5 billion of interest-rate swaps and $20.1 billion of cross-currency swaps outstanding as of March 31, 2000. For further information on swaps and other programs, see the section entitled "1999-2000 Debt and Cash Management Operations by Program."

Chart 7
Composition of Federal Market Debt as at March 31, 2000 (excluding swaps)

(Total $456.4 billion)



Note: Numbers may not add due to rounding.
Source: *Public Accounts of Canada.*

Federal Debt Management Strategy: 1999-2000 Initiatives

Debt management objectives were unchanged from prior years.

The fundamental debt management objective is to raise stable, low-cost funding for the Government. Key strategic objectives are to maintain a prudent debt structure, maintain a diversified investor base, and maintain and enhance a well-functioning market for Government of Canada securities. The federal government uses a number of key measures and operational targets to evaluate its debt management performance against these objectives and to guide debt management decisions to achieve them. (*Debt Management Strategy 2000-2001* outlined the debt management plan for 2000-2001 and is available on the Department of Finance Web site at: www.fin.gc.ca.) For background information on the general framework within which the federal debt is managed, see Annex 1.

Strategic Objective

To raise stable, low-cost funding for the Government by:

- maintaining a prudent debt structure;
- maintaining a diversified investor base; and
- maintaining and enhancing a well-functioning market for Government of Canada securities.

Key Operational Measures

- **Fixed-rate share:** The Government manages the debt stock to preserve the average target fixed-rate portion at the two-thirds level in order to provide assurance that the fiscal impact of most interest rate shocks could be contained within the budget-planning framework.
- **Maturity profile:** The Government manages the maturity structure of the debt to ensure that, to the extent possible, the maturity profile is stable over time.
- **Transparency, liquidity and regularity:** In order to maintain a well-functioning domestic market and keep borrowing costs low, the Government focuses on the key aspects of transparency, liquidity and regularity in its debt operations. For this reason, the Government borrows in the market on a regular, pre-announced basis and builds large bond benchmarks, with liquid new issues supported by a bond buyback program.
- **Matching assets and liabilities:** Currency and interest rate risks arising from the management of the Government's foreign exchange reserves are minimized to the extent possible by matching similar currency and duration assets and liabilities.
- **Market efficiency:** The Government closely monitors turnover and transaction costs in the Government of Canada securities market as indicators of liquidity and market efficiency.
- **Best practices:** The Government seeks to ensure that its operational framework and practices are in line with the best practices of other comparable sovereign borrowers.

Maintaining a Prudent Debt Structure

The Government prudently manages its exposure to changes in interest rates and refinancing risk.

Managing a large stock of debt exposes the Government to financial risk arising from changes in interest rates. Exposure to interest rate risk is managed by maintaining a prudent debt structure that balances costs, or annual debt charges, and risks, or the long-term variability in annual debt charges. The capacity of debt managers to assess risk is continually being upgraded in line with the best practices of other sovereigns.

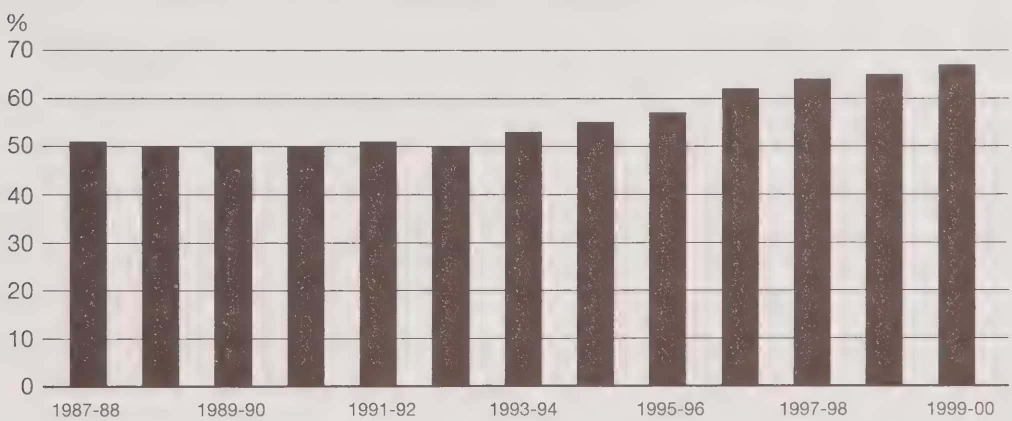
There is generally a trade-off between costs and risks. Costs can be reduced by financing a greater portion of the debt through shorter-term instruments since long-term debt is often more costly than short-term debt. On the other hand, the variability of future debt servicing costs is reduced when the debt is financed largely through long-term instruments, as a smaller portion of the debt matures each year and needs to be refinanced at the then-prevailing market interest rates.

Fixed-Rate Share

A prudent debt structure has a higher component of fixed-rate debt.

Over the 1990s, the Government put in place a more prudent debt structure by altering the term structure of its debt, issuing more long-term debt and reducing the stock of outstanding short-term debt. While there are a number of indicators that can be used to assess the debt structure, the key operational target for the Government is the fixed-rate share. That is, the Government targets the share of interest-bearing debt issued at fixed rates (i.e. debt that does not mature or need to be repriced within a year) relative to the entire interest-bearing debt stock. In moving to a more prudent debt structure, the Government increased the share of the debt stock issued at fixed rates from one-half in 1990 to two-thirds in 1998-99. Over 1999-2000, the debt was managed to preserve the average target fixed-rate portion of the debt at the two-thirds level (see Chart 8).

Chart 8
Fixed-Rate Share of Gross Debt as at March 31



Source: Department of Finance.

Cost/Risk Tradeoff

A prudent debt structure lessens the sensitivity of the budget balance to changes in interest rates.

As noted, there can be a trade-off between the costs and risks related to alternative debt structures. By establishing a more prudent debt structure, the Government has lessened the sensitivity of its underlying budgetary balance to changes in interest rates. However, a higher fixed-rate share of debt gives rise to increased debt servicing costs.

Table 2 provides an illustration of this trade-off using the current debt structure and two alternative debt structures, with 5 per cent more and 5 per cent less fixed-rate debt. It is important to note that the comparisons of alternative debt structures are only indicative because it is impossible to specify what debt issuance decisions would have been taken had the Government been operating with alternative debt targets. Therefore, certain assumptions need to be made regarding the composition of the alternative portfolios. The general approach is to notionally transfer debt between the domestic marketable bond portfolio and the domestic Treasury bill portfolio, which implicitly assumes that any decision to operate with more or less fixed-rate debt would have been reflected in these two portfolios.

As noted in Table 2, the first-year direct impact on the budgetary balance (i.e. the increase in debt service costs net of increased earnings on interest-bearing assets) of a 100-basis-point shock in interest rates in 1999-2000 would be $900 million under the current structure, compared to $1,080 million under a lower fixed-rate share of 62 per cent – some $180 million higher. With a more severe 300-basis-point shock, the degree of protection afforded by alternative debt structures is much larger. For example, debt charges with a 62-per-cent fixed-rate share would be about $540 million higher than with a 67-per-cent fixed-rate share.

The Government's debt strategy is intended to ensure that variability in interest rates could be contained within the fiscal plan over a longer-term horizon.

On the other hand, fixed-rate debt issued since 1996-97 generally paid higher interest rates than Treasury bills paid in 1999-2000, so costs might have been lower by about $190 million[1] in 1999-2000 had the Government not increased the fixed-rate share beyond the 62-per-cent level achieved in 1996-97. Note that this cost differential will vary substantially from year to year based on the term structure of interest rates. The calculations in Table 2, for example, reflect a term structure that has been flatter than historical averages in recent years, which would tend to reduce the cost difference between shorter- and longer-term securities.

It is important to note that these observations merely provide a short-term view of the cost/risk tradeoff. The Government takes a long-term strategic view of the debt portfolio and does not focus solely on the short-term impact of debt management decisions. While the fiscal situation has improved considerably in recent years, the stock of outstanding debt that is exposed to interest rate changes remains very large. A large stock merits prudent attention as adjustments

[1] This is based on the difference between the weighted average yield on fixed-rate bonds issued since April 1997 (about 5.65 per cent) and the weighted average yield on Treasury bills issued during 1999-2000 (about 5.0 per cent). This difference is multiplied by $30 billion, which is equivalent to about 5 per cent of the total interest-bearing debt stock.

to the maturity structure can only be made gradually over time. Medium-term secular increases in interest rates such as those that occurred during the late 1980s have the potential to undermine the Government's fiscal plan. Therefore, the Government's debt strategy is intended to ensure that volatility in interest rates could be contained within the fiscal plan over a longer-term horizon. In general, the Government takes a very prudent approach, a practice that is followed by most other major sovereign borrowers.

Table 2

Sensitivity Analysis of Fixed-Rate Ratio in Early 2000-2001

	First-year impact on debt charges				Debt charges
	100-basis-point shock in interest rates		300-basis-point shock in interest rates		No change in rates
Debt structure	Cost impact	Difference from 67% target structure	Cost impact	Difference from 67% target structure	Difference from 67% target structure
(% fixed)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
62%	1,080	180	3,240	540	-190
67%	900	–	2,700	–	–
72%	720	-180	2,160	-540	190

A new measure has been introduced for debt strategy planning purposes.

Cost at Risk Analysis

The Government recently expanded its long-term cost/risk sensitivity analysis capabilities with the introduction of a new measure known as Cost at Risk (CaR). CaR quantifies the risk of the debt stock in terms of debt costs, allowing a comparison of the long-term interest rate risk of alternative debt structures. Calculation of CaR is based on the future interest costs of a given debt stock under numerous different interest rate scenarios. On the basis of these scenarios, a probability distribution of costs can be calculated. Variations of CaR are used by a number of sovereign borrowers to assess the costs and risks associated with different debt structures.

CaR analysis indicates that the two-thirds fixed-rate structure in place on March 31, 2000, provided assurance that unexpected changes in interest rates could be contained within the fiscal plan over a longer-term horizon. CaR over the budget-planning period did not exceed $3 billion – i.e. there is a 95-per-cent probability that debt charges would not exceed average expected debt costs by over $3 billion in any year over the next five fiscal years. This suggests that the direct impact of most interest rate shocks would be contained within the budget framework with a high degree of certainty.

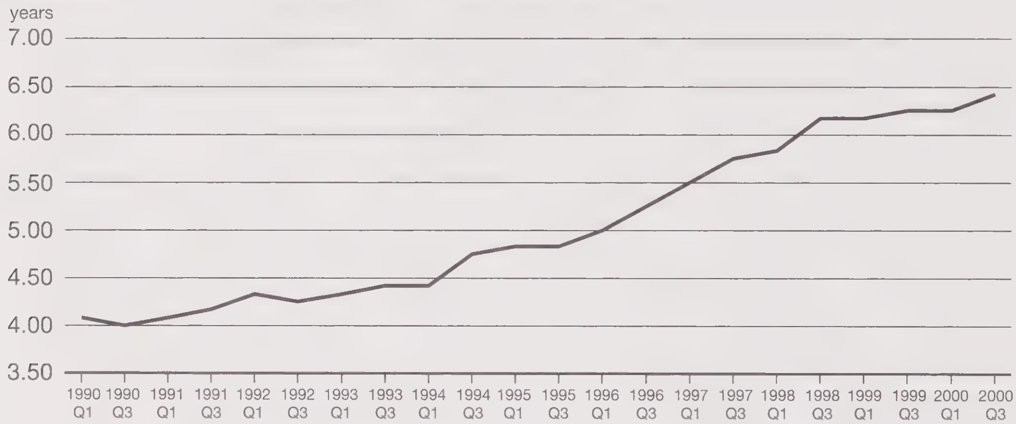
CaR contributes to the Government's debt management decisions by quantifying the risks of alternative debt structures directly in terms of costs. However, unlike other measures such as the fixed-rate share, CaR is not an objective measure. That is, the results depend on the assumptions used to simulate scenarios. In particular, results are very sensitive to the interest rate input. Nevertheless, CaR is an important supplement to established measures such as the fixed-rate share and the maturity profile. The use of CaR in debt strategy planning is still being developed and will be expanded as the techniques are further refined.

Average Term to Maturity

The average term to maturity of the debt increased in 1999-2000.

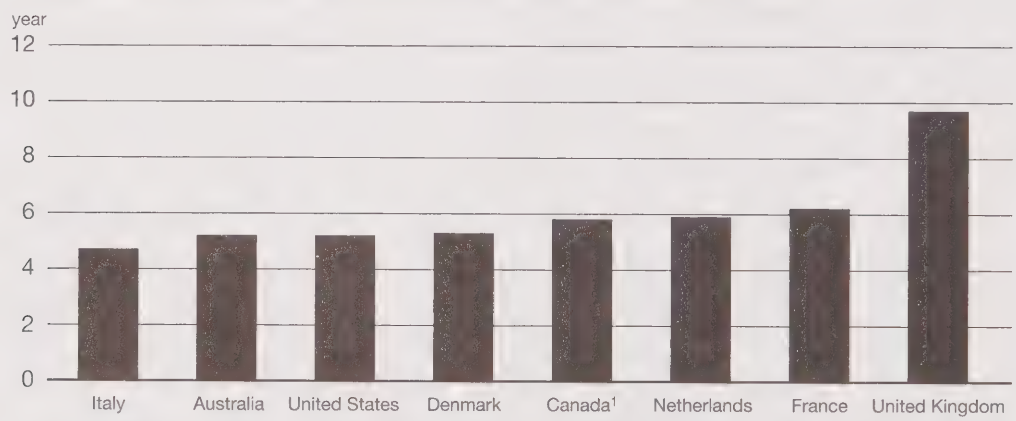
Increasing the fixed-rate component of the debt structure has led to an increase in the average term to maturity of marketable debt from 4.1 years in March 1990 to 6.4 years in March 2000 (see Chart 9). This occurred as the outstanding stock of Treasury bills was reduced and relatively more bonds were issued. These changes have brought the term structure of Canada's debt more in line with the debt structures of many other sovereign borrowers (see Chart 10).

Chart 9
Average Term to Maturity of Marketable Debt



Source: Bank of Canada.

Chart 10
Average Term to Maturity of Government Debt – 1997



[1] Canadian average term maturity is 6.4 years as of March 2000.
Source: Organisation for Economic Co-operation and Development (1997 data).

Maturity Profile

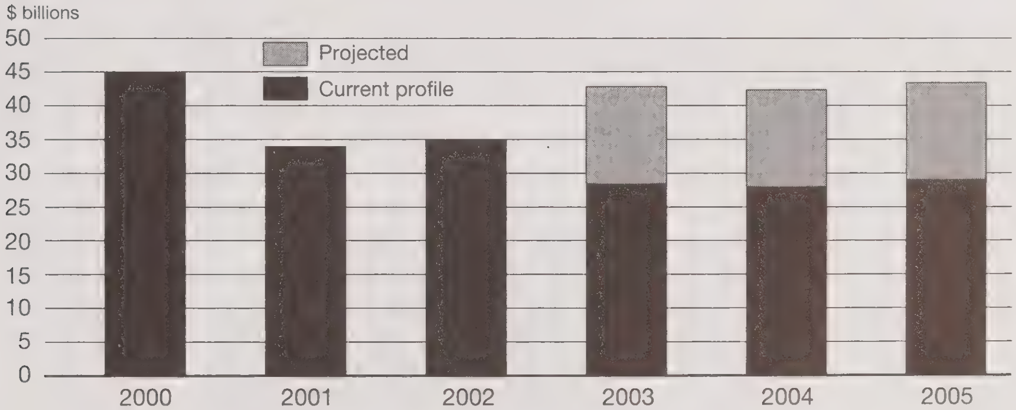
A balanced maturity profile limits the need to refinance a large portion of the debt in a period of higher interest rates.

The Government manages the maturity profile of the debt (i.e. the amount that matures, or comes due, in any given year) to limit its refinancing risk. A stable maturity profile reduces the risk that a relatively large proportion of the debt will mature and need to be refinanced in a period of higher interest rates.

In 1999-2000, for example, some $216 billion of the market debt stock rolled over and was issued at new prevailing interest rates, compared to $422 billion in 1994-95. To a large extent, this reflects the decline in Treasury bill issuance in the late 1990s. The entire stock of Treasury bills matures each year and a substantial portion of, but not all, maturing Treasury bills are reissued. Thus, in 1995, the Government was required to refinance, on average, $8 billion per week in maturing Treasury bills compared to an average of $4 billion per week in 1999. (Treasury bill issuance was changed to biweekly in 1998.)

In addition, as illustrated in Chart 11, initiatives to regularize bond issuance into predictable benchmark securities have led to a gradual smoothing-out of the maturity profile of the bond stock – in particular, the move to building large benchmark bond issues for four maturities of domestic bonds (2-, 5-, 10-year, and long-term) and issuing bonds at regular, quarterly intervals.

Chart 11
Current Maturity Profile of Domestic Bonds



Notes: Excludes Treasury bills. Projections assume future issuance remains at 1999-2000 levels.
Source: Department of Finance.

Maintaining a Diversified Investor Base

A diversified investor base is maintained to help reduce funding costs.

A diversified investor base helps to reduce funding costs. The federal government pursues diversification of its investor base by maintaining a liquid and transparent domestic wholesale debt program that is attractive to investors, and in foreign borrowings through the use of a broad array of sources of funds. In addition, Canada Investment and Savings, the Government's retail debt agency, provides diversification by offering savings products designed to suit the needs of individual Canadians. The retail debt share of the Government of Canada's total market debt was estimated at 21 per cent last year, including estimated individual holdings of marketable securities.

Domestic Holdings of Government of Canada Debt

In 1999 (the latest year for which figures are available) life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (30.6 per cent), followed by public and other financial institutions such as investment dealers and mutual funds (see Chart 12). Taken together, they accounted for 53.5 per cent of domestic holdings.

Bonds and bills held by public and other financial institutions increased sharply over the 1990-1999 period – from 10.6 per cent in 1990 to 22.9 per cent in 1999. Much of the increase can be attributed to a significant increase in holdings by mutual funds.

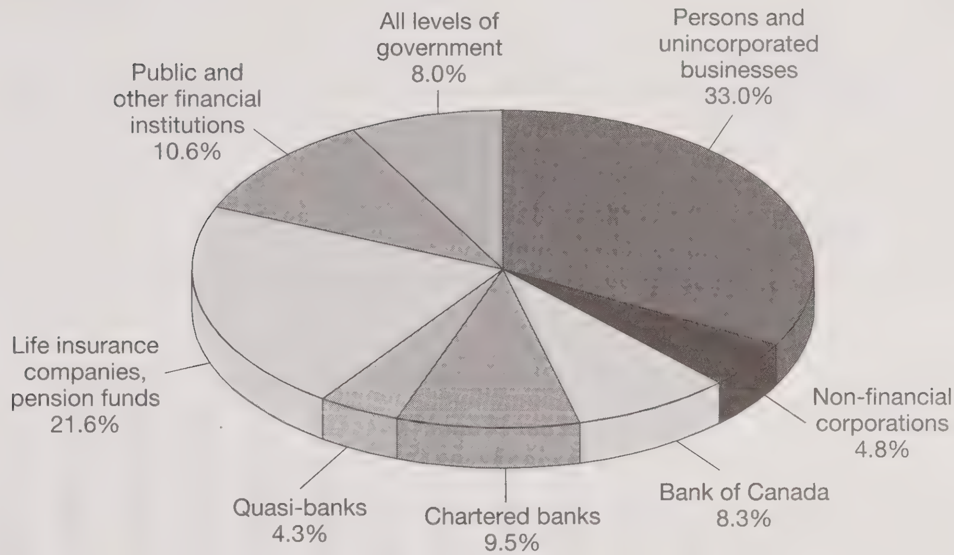
Chartered banks' share of holdings of market debt increased from 9.5 per cent in 1990 to 15.4 per cent in 1999, while the share of persons and unincorporated businesses decreased by almost 23 percentage points since 1990 to 10.4 per cent of domestic holdings.

Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

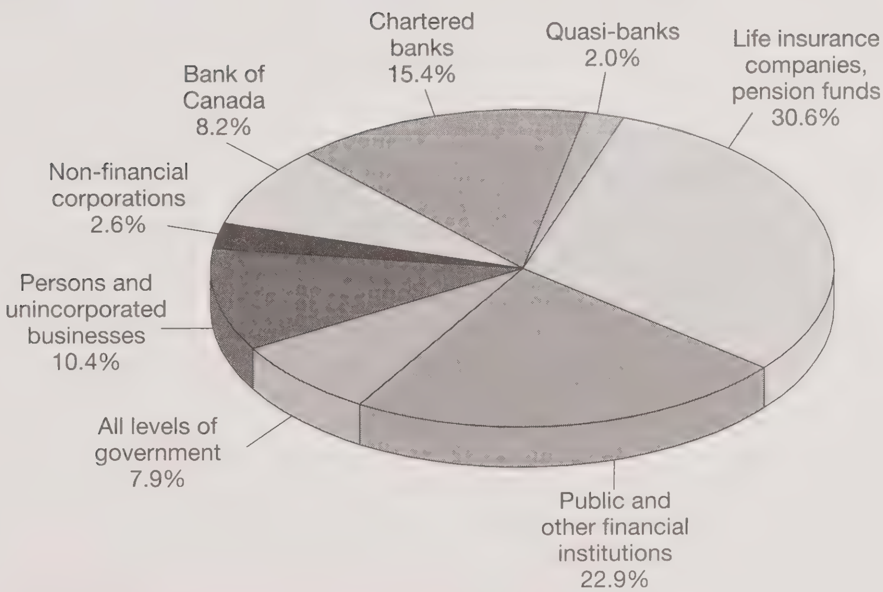
Chart 12

Distribution of Domestic Holdings of Government of Canada Market Debt as of December 31

1990 – $245.5 billion



1999 – $354.8 billion



Note: Numbers may not add due to rounding.
Source: Statistics Canada, *The National Balance Sheet Accounts*.

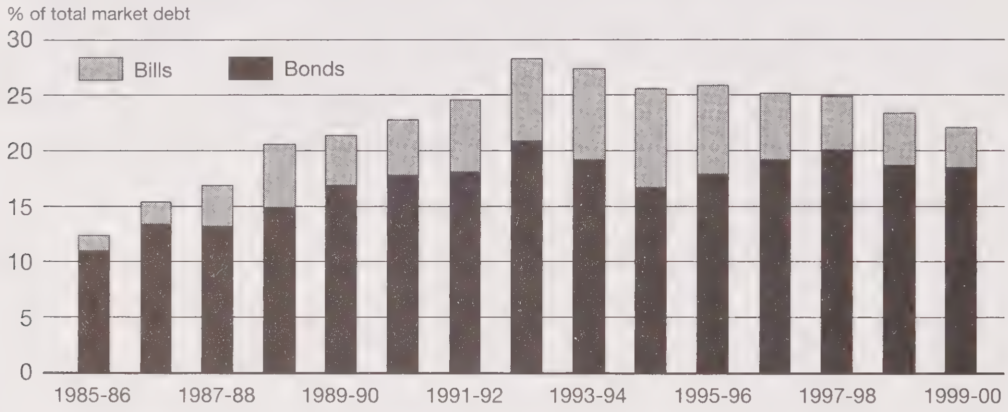
Non-Resident Holdings of Government of Canada Debt

Since 1992-93, the share of total market debt held by non-residents has been steadily declining.

Non-resident holdings of the Government of Canada's total market debt decreased by $6.5 billion in fiscal year 1999-2000. Total non-resident holdings were estimated to be $101.2 billion at the end of March 2000, representing about 22.2 per cent of the Government of Canada's total market debt. Since 1992-93, the share of total market debt held by non-residents has been steadily declining (see Chart 13).

Non-residents held $84.6 billion in government bonds in 1999-2000, a decrease of $1.3 billion from the previous year. Non-resident holdings of bills (Treasury bills and Canada Bills) declined by $5.2 billion over the fiscal year to $16.6 billion (see Reference Table V).

Chart 13
Non-Resident Holdings of Government of Canada Market Debt



Source: Statistics Canada, *Canada's International Transactions in Securities*.

Maintaining a Well-Functioning Market

The Government continues to place emphasis on the principles of transparency, liquidity and regularity.

A well-functioning Government of Canada securities market provides low-cost financing for the federal government by promoting broader participation in the market. Transparency, liquidity and regularity are the principles underlying the maintenance of a well-functioning market. Borrowing in the domestic market on a regular, pre-announced basis and building bond benchmarks reflects these principles. Given the key role played by federal government securities in Canada's fixed-income market, adjustments to the domestic debt programs are made in consultation with market participants. In recent years the Government has made adjustments to its operational framework to enhance the liquidity of the Government of Canada securities market, such as moving to biweekly Treasury bill auctions and reducing the frequency of 30-year bond issuance from quarterly to semi-annually. In 1999-2000, no major adjustments were made to the domestic borrowing programs.

Bond Buyback Program

The bond buyback program was implemented on an ongoing basis as of March 2000.

To enhance the liquidity of Government of Canada securities, a pilot bond buyback program was implemented in 1998-99. The program allows the Government to buy back less liquid, older outstanding bonds, financed through the issuance of replacement current benchmark bonds, thus supporting a liquid new issue bond market.

An evaluation of the pilot, which included feedback from market participants, took place in early 2000. The evaluation indicated that the program has been successful in meeting its stated objectives and has been generally helpful to the market. The repurchase program enabled the Government to conduct larger auctions in both 1998-99 and 1999-2000 than would have resulted in the absence of a buyback program, helping to support the maintenance of liquidity in the primary market for Government of Canada securities. An additional benefit of the program was improved secondary market liquidity as demand increased for previously issued bonds.

As a result, the program was implemented on an ongoing basis as of March 2000.

Stripping and Reconstitution of Bonds

The Government agreed to remove the ceiling on the reconstitution of bonds to enhance liquidity.

In June 1999, the Investment Dealers Association of Canada (IDA) requested that the federal government approve removal of the ceiling on the reconstitution of Government of Canada securities. The ceiling limited the amount of a given bond, held in the Canadian Depository for Securities Limited (CDS), that could be reconstituted to the amount previously stripped.

Stripping involves separating bonds into individual interest and principal payment components, while reconstitution involves collecting individual components to create whole bonds, the opposite of stripping. For example, if two bonds share the same maturity date, an investor could strip the principal component of the second bond and use it to reconstitute synthetically the first bond (with the appropriate stripped coupon cash flows from any stripped bond). Stripping is done to create new investment and risk management opportunities and is used to take advantage of price differences in markets. The effect of the ceiling on reconstitution was essentially to limit the liquidity of the market.

The federal government reviewed the proposal during 1999-2000, a review that included consultations with market participants, and in June 2000 announced its support for the IDA's proposal. This means that where there are two Government of Canada securities with matching maturity dates, market participants will be able to strip one to synthetically recreate the other without being limited by the original issue sizes. The greatest practical benefit will be in cases where smaller, less liquid securities share the same maturity dates as benchmark securities, in which cases additional supply of the benchmark securities can be created. The federal government views this initiative as an additional tool for enhancing liquidity in the Government of Canada securities market, particularly for benchmark securities, and as a complement to the bond buyback program. CDS is currently working on the implementation of the proposal, which is subject to regulatory approval.

Cash Management Framework

The main objectives of the federal government's cash management operations are to ensure that the Government has sufficient cash available to meet its operating and liquidity requirements, and to invest cash in a prudent, cost-effective manner. Currently, the federal government invests its cash balances with a limited number of deposit-taking institutions (participants in the Large Value Transfer System) through a twice-daily auction process.

A proposed revision to the cash management framework has been released.

In 1999-2000, the Department of Finance and the Bank of Canada undertook a review of the investment framework for the Government's domestic cash balances, as part of ongoing efforts to ensure that the Government's financing and investing operations are efficient and cost-effective, and meet the standards of best practices appropriate for a sovereign government. This culminated in a discussion paper entitled "Proposed Revisions to the Rules Pertaining to Auctions of Receiver General Term Deposits," which was released in July 2000. (The document is available on the Internet at the following address: http://www.bankofcanada.ca/en/cash-bal.htm).

The proposals outlined in the paper are designed to increase competition in the Receiver General auction process and to strengthen the management of risks, in particular the credit risks involved in the investment of cash balances. In summary, it is proposed that access to the auctions be opened to all significant players in the domestic money market. Broadening access will likely have a positive effect on returns earned on cash balances and diversify the Government's counterparties. The paper also proposes to introduce a credit risk management system through the use of credit lines, credit ratings and collateral. These proposals will make the market for federal cash balances more transparent, active and competitive, thereby enhancing the efficient functioning of the domestic financial system. In the coming months, the Department of Finance and the Bank of Canada will consult and work with market participants on the implementation of the new framework, scheduled for early 2001.

Auditor General Review of the Debt Management Program

In April 2000, the Office of the Auditor General of Canada tabled as part of its annual *Report of the Auditor General of Canada* to the House of Commons a report on its audit of the Government's debt management program entitled *Managing Canada's Debt: Facing New Challenges*. (The report can be found on the Auditor General's Web site at www.oag-bvg.gc.ca.) This report is the second in recent years on the debt management program (in 1996, the Auditor General released a report entitled *Federal Debt Management*). The objectives of the 1999-2000 audit were to assess the degree to which the Government reviews the performance of its debt management practices against objectives and to assess the adequacy of the program's current governance structures and practices.

The debt management program was examined by the Auditor General, who concluded it is well run.

The report concluded that Canada's debt management program is a well-run operation overall, but highlighted some challenges ahead in a changing debt management environment. These include suggestions that the Government review issues related to the federal debt management governance structure, increased transparency of costs and benefits of debt management decisions, and enhanced performance measurement.

The Government is addressing issues raised by the Auditor General's audit. As a first step, *Debt Management Strategy 2000-01*, released in March 2000, included a more complete discussion of the costs and risks associated with different fixed-rate debt structures. This work has been expanded with this year's *Debt Management Report*, which sets out the key measures and operational targets that the Government uses to assess debt management performance and guide debt management decisions. Also, in 2000, the Government initiated a review of the governance frameworks of comparable sovereign borrowers to determine whether there are best practices that are relevant for Canada.

Collective Action Clauses

Collective action clauses were added to foreign bond documentation to promote international financial stability.

In April 2000, the Government announced that Canada would be adopting collective action clauses in its foreign currency bond and note issues. Collective action clauses in bond contracts facilitate debt restructuring by providing an orderly framework for debtors and creditors. These clauses are an important part of Canada's effort to promote international financial stability and reduce the risk and severity of global financial crises. By adopting collective action clauses, Canada is helping to lead the process of having them adopted by all countries. The wider adoption of collective action clauses was first recommended in the 1996 G-10 report, *The Resolution of Sovereign Liquidity Crises* (the Rey Report), and again in the 1998 report of the G-22 Working Group on the Resolution of Financial Crises.

The documentation governing Canada's two foreign currency note programs (the Canada Note and Euro Medium-Term Note programs) is being modified to ensure that all future issuance under these programs includes collective action clauses. Future global bond issues by Canada will also include these clauses.

Government of Canada Securities Market

Turnover and Liquidity

Levels of turnover and liquidity in the Government of Canada securities market continue to be good.

The Government of Canada securities market has traditionally enjoyed very high levels of efficiency in terms of turnover and liquidity. An efficient Government of Canada securities market contributes to lower interest costs for the federal government and is also of general benefit to the domestic capital market, where federal securities are key benchmarks for pricing and act as hedging tools.

In the aftermath of the Asian crisis in 1998, the Canadian fixed-income market, like all major fixed-income markets around the world, experienced reductions in turnover and liquidity from peak levels of previous years. The decline is a product of many factors. Among those cited by market participants are that institutional investors are generally trading securities less frequently, and fixed-income funds are increasingly managed in a "passive" indexed manner. Moreover, some major trading funds ("hedge funds") have withdrawn completely from the market. Market intermediaries have also generally reduced capital allocations to risk-taking trading activities and are therefore less willing to provide liquidity to the market. The Government of Canada securities market has been affected by these trends.

As a result, bond turnover has declined from an average of 3.7 (equivalent to 3.7 times the outstanding stock) in 1998-99 to 2.9 in 1999-2000. Treasury bill turnover declined from an average of 4.1 in 1998-99 to 3.4 in 1999-2000. Nevertheless, Canada's fixed-income market continues to be one of the most efficient in the world. Indicators of the efficiency, liquidity and depth of the market include tight bid-offer spreads for the various instruments, the large volume of transactions and turnover ratios comparable to those of other G-7 countries, with the exception of the U.S. (see Charts 14 to 17).

Important complements to an efficient Government of Canada securities market are the availability of futures contracts, as well as the ability to strip and reconstitute bonds and enter into repurchase agreements.

Regulatory Developments

Domestic regulators are proposing to enhance the transparency of fixed-income markets.

The Canadian Securities Administrators (CSA) issued a concept release on the regulation of "Alternative Trading Systems" (ATSs) in July 1999 and a subsequent regulatory proposal in July 2000. ATSs are market intermediaries that serve many of the functions of traditional stock exchanges. The rapid development of information technology has caused ATSs to assume a much more prominent role in capital markets than in the past. The CSA policy proposal was aimed at addressing issues related to market fragmentation, price discovery, transparency and regulation.

The Government of Canada responded to the CSA's proposal, raising questions about the potential implications for fixed-income markets. As there are no ATSs currently operating in Canada in the fixed-income market under the proposed CSA definitions, the major impacts of the proposal are with respect to the proposed changes to the transparency rules governing the debt market. Canada now fully meets international standards for government bond market transparency through the CanPX system. The Government is working with the CSA on these important regulatory issues.

Futures

In Canada, the trading volume of futures contracts maintained the levels of previous years. There is an active futures contract based on 3-month bankers' acceptance rates (the BAX contract), as well as 5- and 10-year Government of Canada bond futures contracts (the CGF and CGB contracts). The futures contract on 3-month bankers' acceptances, which is the most actively traded contract on the Montreal Exchange, has become a highly liquid security. In 1997, the value of BAX open interest[2] surpassed the amount of Treasury bills outstanding. Daily BAX trading volume rose 150 per cent to 23,934 contracts between 1996 and 1999, with an average daily open interest of 216,209 contracts. In addition, the open interest of the futures contract on 10-year Government of Canada bonds almost quadrupled from 1993 to 1999.

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[2] The total value or number of contracts outstanding at any given time.
Source: the Montreal Exchange.

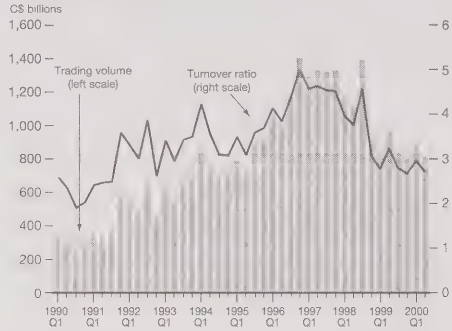
Government of Canada Securities Market

The volume of transactions in the Government of Canada bond market has grown significantly since 1990, but has dropped over the past year. The volume of transactions in the Treasury bill market increased sharply from 1990 to 1995, but has since declined as the stock of Treasury bills outstanding has fallen. In the second quarter of 2000, total Treasury bill turnover was $296.1 billion. The quarterly turnover ratio was 3.3 in the second quarter of 2000 (see Chart 14). Total marketable bond turnover was $807.6 billion in the second quarter of 2000, a 145-per-cent increase from the first quarter of 1990. The quarterly turnover ratio was 2.7 in the second quarter of 2000 compared to 2.6 in the first quarter of 1990 (see Chart 15).

Chart 14
Government of Canada Treasury Bills Trading Volume and Turnover Ratio

Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

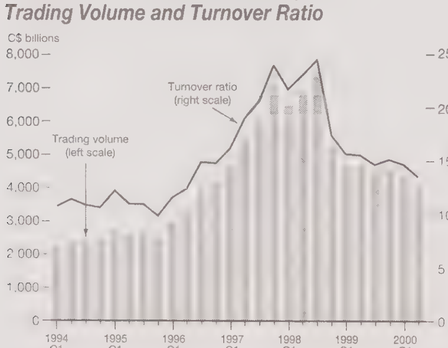
Chart 15
Government of Canada Bonds Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

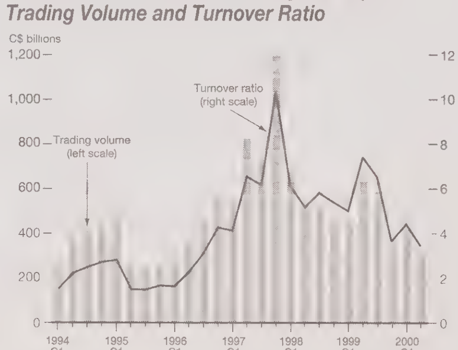
The significant growth in the trading volume and turnover ratios in the repo market over the past five years provides further evidence of an efficient Canadian government securities market. The total quarterly turnover for Government of Canada bond repos has increased from $2,194 billion in the first quarter of 1994 to $4,031 billion in the second quarter of 2000. Furthermore, the quarterly turnover ratio for bond repos in the second quarter of 2000 was 13.5, up from about 11 in early 1994 (see Chart 16). The Treasury bill repo market is less active than the bond repo market; nevertheless, it is quite efficient, with total quarterly turnover in the second quarter of 2000 at $309.2 billion and a quarterly turnover ratio of 3.4 (see Chart 17).

Chart 16
Government of Canada Bond Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

Chart 17
Government of Canada Treasury Bill Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

1999-2000 Debt and Cash Management Operations by Program

Market debt declined by $4.0 billion in 1999-2000.

This section provides details on the operations of each major debt program (see Table 3). In 1999-2000, the amount of market debt held in short-term instruments, primarily Treasury bills, increased while the amount held in longer-term instruments decreased slightly.

Table 3
Composition of Federal Market Debt, 1999-2000

	March 31, 1999	March 31, 2000	Change
		(C$ billions)	
C$-denominated			
Fixed-coupon bonds	284.1	280.6	-3.5
Real return bonds[1]	11.7	13.3	1.6
Treasury bills	97.0	99.9	2.9
Canada Saving Bonds and Canada Premium Bonds	27.7	26.5	-1.2
Total domestic debt	420.4	420.3	-0.1
Foreign-currency-denominated			
Canada Bills	10.2	6.0	-4.2
Foreign bonds	19.6	21.4	1.8
Canada Notes	1.3	1.1	-0.2
Euro Medium-Term Notes	4.9	4.1	-0.8
Total foreign debt	36.0	32.6	-3.4
CPP bonds and notes	4.1	3.6	-0.5
Total market debt	460.4	456.4	-4.0

Notes: As at March 31, 2000, the total amount of interest-rate and cross-currency swaps outstanding stood at C$22.6 billion (see Reference Table XII). Numbers may not add due to rounding.

[1] Includes consumer price index adjustment.

Source: *Public Accounts of Canada*.

Domestic Debt

A key principle of domestic debt management is that the funding required for the Government's domestic operations is raised in the domestic market.

Fixed-Coupon Marketable Bonds and Bond Repurchase Transactions

Fixed-coupon marketable Government of Canada bonds are issued in Canadian dollars and pay interest semi-annually.

The gross nominal bond program was $44.8 billion in 1999-2000.

In 1999-2000, gross issuance of nominal bonds consisted of $14.2 billion of 2-year bonds, $13.95 billion of 5-year bonds, $12.9 billion of 10-year bonds and $3.7 billion of 30-year bonds. Marketable bonds represent the largest share (61.5 per cent) of the federal government's outstanding market debt (see Chart 7).

The Government repurchased through the bond buyback program $3.3 billion of marketable bonds – $1.1 billion in the 2-year maturity area, $1.1 billion in the 5-year maturity area and $1.1 billion in the 10-year area (see Reference Table X).

Net new issuance of fixed-coupon marketable bonds during the year, taking into account buybacks and maturities, totalled -$3.5 billion (gross issuance less repurchases less maturing issues), bringing the stock of outstanding marketable bonds down to $280.6 billion as at March 31, 2000.

The distribution of the outstanding stock of fixed-coupon marketable bonds at the end of 1999-2000 is shown in Table 4.

Table 4
Outstanding Fixed-Coupon Marketable Bonds as at March 31, 2000

	(C$ billions)
0-2 years	68.7
2-5 years	84.9
5-10 years	62.0
10-30 years	65.0
Total	**280.6**

Source: Bank of Canada.

Real Return Bonds

A total of $1.25 billion in RRBs were issued.

Real return bonds (RRBs), introduced in 1991, provide cost-effective diversification of the marketable bond program for the Government. RRBs are used to diversify the Government's funding sources and serve the needs of investors such as indexed pension funds, which need long-term inflation-protected investments. They are issued via quarterly single-price auctions.

Issuance of RRBs in 1999-2000 totalled $1.25 billion through four auctions, bringing the level of outstanding RRBs to $13.25 billion as at March 31, 2000, including $0.3 billion in consumer price index adjustment (see Reference Table IX).

Treasury Bills

The Treasury bill stock increased by $2.9 billion to $99.9 billion at year end.

Treasury bills with terms to maturity of 3, 6 and 12 months are offered on a biweekly basis. Cash management bills of shorter maturities are issued from time to time to facilitate the management of the Government's cash balances.

The stock of outstanding Treasury bills increased by $2.9 billion during the 1999-2000 fiscal year to a level of $99.9 billion at March 31, 2000 (see Reference Table VI).

Foreign Debt

The Government of Canada borrows in foreign currencies exclusively to raise foreign exchange reserves for the Exchange Fund Account. The Exchange Fund Account is a pool of assets available for use to promote order and stability of the Canadian dollar in the foreign exchange market and for general liquidity purposes. The key objectives of Canada's reserve program are to:

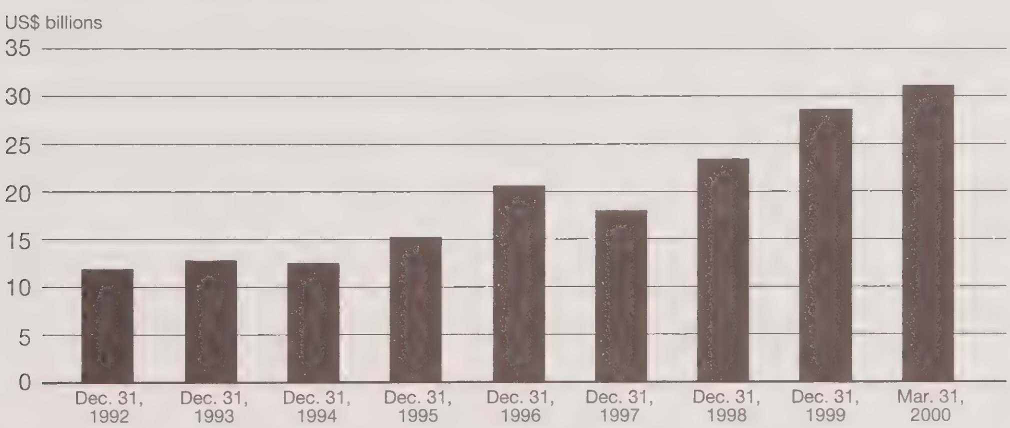
- ensure that an appropriate level of reserves is maintained while minimizing the cost of carrying reserves; and
- immunize to the extent possible currency and interest rate risks by selecting reserve assets that match the liabilities in currency and duration.

Foreign debt operations, primarily in the form of cross-currency swaps, increased international reserves by US$6.1 billion in 1999-2000.

The Government has made a steady effort to increase Canada's international reserves to bring the level more in line with that of comparable sovereigns. Reserves have been increased from US$11.9 billion at December 31, 1992 to US$31.1 billion at March 31, 2000 (see Chart 18). In 1999-2000, international reserves increased by US$6.1 billion, while foreign currency debt fell by US$0.9 billion. Foreign exchange reserves increased as a result of cross-currency swaps of domestic obligations and purchases of US dollars in the spot foreign exchange market. With the increases since 1996, the Government has made substantial progress in meeting its objectives.

Foreign currency liabilities came to exceed liquid foreign currency assets (i.e. cash, deposits and securities) in the Exchange Fund Account in recent years, largely as a result of extensive foreign exchange intervention and important commitments to the International Monetary Fund in 1998. Consistent with the Government's policy of immunizing currency and interest rate risk in Canada's reserve program, the Government is taking steps to bring foreign currency liabilities in line with foreign currency assets.

Chart 18
Canada's International Reserves – December 1992 to March 2000



Sources: Department of Finance; International Monetary Fund, *International Financial Statistics*.

A program of purchases of US dollars was implemented to eliminate the gap between foreign currency liabilities and assets.

In December 1998, the Department of Finance, in collaboration with the Bank of Canada, implemented a program of purchases of US dollars in the foreign exchange markets. The proceeds of sales of Canadian dollars are used to reduce US-dollar-denominated liabilities. This program is conducted by the Bank in its role as fiscal agent for the Government in its management of the federal debt. Purchases of US dollars are small in relation to the large daily flows in foreign exchange markets and are undertaken with sensitivity to market conditions. The objective is to close the gap between foreign currency assets and liabilities over the next few years. When the program was implemented, the gap was some US$13 billion, and substantial progress has been made in closing it: as of March 31, 2000, the gap between foreign currency liabilities (US$36.1 billion) and liquid foreign currency assets (US$27.6 billion) stood at some US$8.5 billion.

As of March 31, 2000, total foreign currency liabilities stood at US$36.1 billion – US$22.9 billion in foreign currency debt and US$13.2 billion in cross-currency swaps (see Table 5). Canada's direct foreign currency debt represents 7.1 per cent of its total outstanding market debt. Taking into account the effect of cross-currency swaps, foreign currency obligations represent 11.4 per cent of total market debt.

Foreign currency debt outstanding consists of Canada Bills, Canada Notes, Euro Medium-Term Notes and foreign bonds, along with swaps of domestic liabilities. 1999-2000 highlights by program are provided below.

Table 5
Foreign Currency Liabilities

	March 31, 1999	March 31, 2000	Change
		(US$ billions)	
Canada Bills	6.7	4.1	-2.6
Canada Notes	0.8	0.7	-0.1
Euro Medium-Term Notes	3.3	3.0	-0.3
Foreign bonds	13.0	15.0	2.0
Total foreign currency debt	23.8	22.9	-0.9
Cross-currency swaps	10.0	13.2	3.2
Total foreign currency liabilities	33.8	36.1	2.3

Note: Numbers may not add due to rounding.

Canada Bills and Canada Notes

Canada Bills, which are short-term promissory notes denominated in US dollars, are issued in the US market as a source of low-cost US dollar funding. The level of outstanding Canada Bills decreased from US$6.7 billion to US$4.1 billion during 1999-2000.

Canada Notes are used as required to raise fixed- and floating-rate funding for terms longer than nine months. The stock of outstanding Canada Notes, which the Government began to issue in March 1996, fell slightly from US$0.8 billion to US$0.7 billion during 1999-2000. There were no new Canada Note issues in 1999-2000.

Euro Medium-Term Notes

In 1999-2000, there were no new EMTN transactions and the total outstanding decreased by US$0.3 billion.

The Euro Medium-Term Note (EMTN) program was introduced in March 1997 to diversify the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under the new program can be denominated in a range of currencies and structured to meet investor demand. Obligations are usually swapped to US dollars, the primary currency held in the foreign exchange reserves. In 1999-2000, there were no new EMTN transactions and the total outstanding decreased from US$3.3 billion to US$3.0 billion.

Foreign-Currency-Denominated Bonds

The federal government issued a US$2.0 billion, five-year global bond in November 1999.

At the end of 1999-2000, Canada had US$15.0 billion equivalent in fixed-rate bonds outstanding. The federal government issued a US$2.0-billion, five-year global bond in November 1999. The issue was well received by investors and broadly distributed around the world.

Cross-Currency Swaps

In 1999-2000, the federal government raised US$3.2 billion through cross-currency swaps.

A cross-currency swap is an agreement that exchanges one type of return for another (e.g. a fixed for a floating rate of interest) and the principal amount for the term of the swap. Cross-currency swaps of domestic obligations are a cost-effective alternative to foreign-currency-denominated bond issues, as a means of meeting the Government's targets for longer-term foreign currency funding. In 1999-2000, the federal government raised US$3.2 billion in foreign exchange reserves at cost-effective funding levels by entering into 57 cross-currency swaps. This is a decrease from the previous fiscal year, when the Government entered into 59 cross-currency swaps to raise US$4.7 billion in foreign exchange reserves. The total amount of cross-currency swaps outstanding as at March 31, 2000 stood at US$13.2 billion.

Retail Debt

Retail debt is broadly defined as Government of Canada securities held by individual Canadians, and includes both non-marketable and marketable debt denominated in Canadian dollars. The level of outstanding non-marketable debt – Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs) – decreased from $27.7 billion to $26.5 billion during 1999-2000.

In 1999-2000, the CSBs and the CPBs were concurrently on sale for a second six-month pilot.

In 1999-2000, CSBs and CPBs were concurrently on sale for a second six-month pilot. The CSB featured one-year pricing and cashability of the principal at any time with interest cashable only three months after purchase. The CPB featured longer-term pricing higher than the CSB but with cashability reduced to once a year. Both bonds have registered retirement savings plan and registered retirement income fund options. Introduced in the fall of 1998, the CPB continued to be successful and further diversified the Government's investor base. For further information on retail debt operations, see the Canada Investment and Savings Web site at: http://www.csb.gc.ca/.

Management of the Government's Cash Balances

The level of the Government's daily cash balances averaged $9.0 billion in fiscal 1999-2000, up from $7.1 billion in 1998-99.

Management of the Government's cash balances requires forecasting and monitoring of its daily receipt and disbursement flows, as well as an ongoing borrowing program to refinance maturing debt and maintain the balances at targeted levels. There are inherent and large uncertainties in forecasting daily changes in cash balances, owing to the scope of the Government's financial operations, the operations of the Bank of Canada and changes in market conditions. An adequate level of cash balances must be maintained at all times to meet these operational requirements and provide an appropriate liquidity cushion for the Government's financial operations.

The level of the Government's daily cash balances averaged $9.0 billion in fiscal 1999-2000, up from $7.1 billion in 1998-99.

Cash balances are invested as term deposits with participants of the recently established Large Value Transfer System. These deposits are placed with the institutions through an auction process in order to earn competitive market rates of return. In 1999-2000, earnings on term deposits averaged 4.78 per cent versus 5.06 per cent the previous year.

Annex 1

Federal Debt Management Framework

Legal Authorities

The Financial Administration Act (the "FAA") provides the statutory framework under which the Minister of Finance borrows money for the Government in financial markets. The FAA states that the Minister cannot borrow money without the authority of Parliament. Parliament authorizes the Minister to borrow new funds through borrowing authority acts. The Minister is authorized by the FAA to refinance maturing debt without further parliamentary authority. The Act provides the Minister with the authority to use modern financial and risk management tools and techniques such as interest rate and currency swaps, options, futures and forwards in the conduct of the Government's financial operations and for risk management purposes. In addition, the Act provides the Minister of Finance with legislative authority to establish rules governing the sale of its debt.

In addition to the FAA, the Bank of Canada Act provides statutory authority for the Bank of Canada to act as the Government's fiscal agent. The Currency Act establishes the Exchange Fund Account and provides statutory authority for the Minister of Finance to manage the Account.

Institutional Responsibilities

The Department of Finance, including Canada Investment and Savings (CI&S), the Government's retail debt agency, manages federal market debt in conjunction with the Bank of Canada. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, for the investment of the Government's cash and reserve assets, and for the management of financial risks.

The Division works with the Bank of Canada, the Government's fiscal agent, on all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management, e.g. conducting the auctions of government debt, issuing debt instruments, making interest payments and conducting foreign currency borrowing operations. The Bank also has responsibility for monitoring market activities and advising on debt management policy issues, as well as operating the Government's Risk Management Unit.

CI&S is a special operating agency of the Government, and its primary responsibility is the day-to-day management of the Retail Debt Program. CI&S, working in consultation with the Bank of Canada and Financial Markets Division, is responsible for developing the Retail Debt Program's strategic direction and managing the front office aspects of the program.

Domestic Debt Operations

Domestic borrowings are done strategically, i.e. securities are issued on a regular, transparent basis to maximize investor interest and participation. Marketable bonds, real return bonds and Treasury bills are sold via auction, with the Bank of Canada operating as the Government's fiscal agent, to Government of Canada

securities distributors and end-investors. Tenders are submitted to the Bank of Canada via the electronic auction system CARS (Communications, Auctions and Reporting System).

Bonds are auctioned on a quarterly basis in the 2-, 5- and 10-year maturities, and on a semi-annual basis in the 30-year maturity. Bonds may be either new maturities, or reopenings of previously auctioned bonds. New issues are generally reopened several times in order to increase the size of the issue to the target benchmark bond size.

The bond auction calendar, setting out details of the planned quarterly issuance of marketable bonds, is published prior to the start of each quarter. Final details, including the amounts to be auctioned, the maturity date, and the amount outstanding in the case of bond reopenings, are released one week prior to the auction.

Bond sales take place via multiple-price auctions, with the exception of real return bonds, which are sold via single-price auctions. Government securities distributors and investors may submit competitive tenders or non-competitive tenders. For multiple-price auctions, competitive bids are accepted in rising order of yield (declining order of price) until the full amount of the issue being auctioned is allotted, while non-competitive bids are allotted at the average of the accepted competitive bids. For single-price auctions of real return bonds, bonds are allotted at the price equivalent of the highest real yield of accepted competitive tenders, plus accrued interest and inflation adjustment.

Treasury bills are sold via auction on a discount basis. Treasury bills with terms to maturity of approximately 3, 6 and 12 months are currently auctioned on a biweekly basis, generally on a Tuesday for delivery Thursday. Under the biweekly issuance pattern, new 3-month Treasury bills are issued at each biweekly auction; new 6- and 12-month Treasury bills are offered in the same week and then reopened once at the next regular auction two weeks later.

The terms for auctions for Government of Canada securities, the terms of participation at auctions and the quarterly bond auction schedule and auction results are available on the Bank of Canada's Web site at: www.bankofcanada.ca.

Domestic Distribution System

The participation of distributors and end-investors at Government of Canada debt auctions is governed by a set of auction rules and terms of participation introduced in October 1998.

There are 25 government securities distributors[3] (GSDs) that participate in the primary distribution of bonds and Treasury bills. All GSDs must be either members or affiliate members of the Investment Dealers Association of Canada (IDA) and have their core trading and sales operation for Government of Canada securities in Canada.

[3] More information on government securities dealers and IDA Policy No. 5 is available on the Bank of Canada's Web site at www.bankofcanada.ca.

Under the auction rules and terms for participants, there are specific bidding limits which apply to GSDs and end-investors at Treasury bill and bond auctions. The limits vary by distributor based on the firms' relative market activity in the primary and secondary market for the securities. Separate bidding limits apply for Treasury bill and bond auctions. All GSDs also have ongoing reporting responsibilities to provide the Bank of Canada with market information involving Government of Canada securities. In addition, all bidders at auction of Government of Canada securities, including customers, must abide by IDA Policy No. 5[4] governing standards for trading of debt securities in Canada.

GSDs that maintain a certain threshold of activity in the primary and secondary market for Government of Canada securities become primary dealers, and form part of the core group of distributors of Government of Canada securities. The primary dealer classification can be attained in either Treasury bills or marketable bonds, or both. Primary dealers assume a number of responsibilities with respect to Government of Canada securities – they must comply with minimum bidding requirements for every auction so as to provide coverage at auctions as a group, and consistently make two-sided markets to a broad customer base.

Foreign Debt Operations

Foreign currency debt is made up of a short-term US-dollar commercial paper program (Canada Bills), two medium-term Note programs (Canada Notes and Euro Medium-Term Notes) and large public bond issues. These securities are issued on an opportunistic basis when required and when market conditions are favourable. The Government also obtains foreign-denominated funding through purchases of US dollars in the spot foreign exchange market and through cross-currency swaps of domestic obligations.

Retail Debt Operations

The Government sells Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), referred to as non-marketable savings instruments, directly to individuals, or "retail" investors, who are Canadian residents.

Two principal channels are used for direct sales of CSBs and CPBs: the Payroll Savings Program and financial institutions. The Payroll Savings Program allows employees of employers sponsoring the program to purchase CSBs during the sales campaign through payroll deduction.

Canadians can also purchase CSBs and CPBs wherever they bank or invest, including banks and trust companies, investment dealers, savings and loan companies and credit unions. Additionally, Canadians, on a pilot basis, can purchase CSBs and CPBs directly by telephone from the Bank of Canada.

[4] More information on government securities dealers and IDA Policy No. 5 is available on the Bank of Canada's Web site at www.bankofcanada.ca.

Annex 2

Government of Canada Market Debt Instruments

Fixed-Coupon Marketable Bonds

Effective October 1995, Government of Canada marketable bonds are issued in global certificate form only whereby a global certificate for the full amount of the bonds is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). The bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to December 1993, Government of Canada bonds were issued in coupon-bearer and fully registered form, and were available in denominations ranging from $1,000 to $1,000,000. Between December 1993 and September 1995, Government of Canada bonds were issued only in fully registered form. All Canadian dollar marketable bonds are non-callable and pay a fixed rate of interest semi-annually.

Treasury Bills

Effective November 1995, all new issues of Treasury bills are issued is global certificate form only whereby a global certificate for the full amount of the Treasury bills is issued in fully registered form in the name of CDS & Co., a nominee of the CDS. Treasury bills must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to November 1995, Treasury bills were issued in bearer form and were available in denominations ranging from $1,000 to $1,000,000.

The Government of Canada also periodically issues cash management bills (CMBs). CMBs are Treasury bills with maturities of less than three months (they can be as short as one day) used as a source of short-term financing for the Government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Government of Canada Real Return Bonds

Government of Canada real return bonds (RRBs) pay semi-annual interest based upon a real interest rate. Unlike standard fixed-coupon marketable bonds, interest payments on RRBs are adjusted for changes in the consumer price index (CPI). The CPI, for the purposes of RRBs, is the all-items CPI for Canada, not seasonally adjusted, published monthly by Statistics Canada. The semi-annual nominal coupon payments are calculated as follows:

coupon payment$_i$ = real coupon rate/2 × (principal + inflation compensation$_i$) where inflation compensation$_i$ = ((principal × reference CPI$_i$/reference CPI$_{base}$) – principal).

Reference CPI for the first day of any calendar month is the CPI for the third preceding calendar month. The reference CPI for any other day in a month is calculated by linear interpolation between the reference CPI applicable to the first day of the month in which such day falls and the reference CPI applicable to the first day of the month immediately following. The reference CPI$_{base}$ for a series of bonds is the reference CPI$_i$ applicable to the original issue date for the series.

At maturity, bondholders will receive, in addition to a coupon interest payment, a final payment equal to the sum of the principal amount and the inflation compensation accrued from the original issue date – i.e. final payment = principal + ((principal x reference $CPI_{maturity}$/reference CPI_{base}) – principal).

These bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service and only in integral multiples of $1,000 (face value).

Canada Savings Bonds

Canada Savings Bonds (CSBs) are offered for sale by most financial institutions in Canada. In addition, a significant number of organizations sponsor the Payroll Savings Program, thus allowing many Canadians to purchase CSBs through payroll deductions.

Except in certain specific circumstances, CSBs can be registered only in the name of residents of Canada. They are available in both regular interest and compound interest forms. For those CSBs which are certificated, denominations range from $100 ($300 for a regular interest bond) to $10,000. All CSBs are non-callable and, except in certain limited circumstances, non-transferable.

CSBs provide minimum guaranteed annual interest rates. The minimum guaranteed annual interest rates will be increased if market conditions warrant, but the bondholder will not earn less than the rates announced for that series for the posted period. CSBs are cashable at any time and, after the first three months, pay interest up to the end of the month prior to encashment. Principal and interest are fully backed by the Government of Canada.

Canada Premium Bonds

The Canada Premium Bond (CPB) was introduced by the Government of Canada in 1998. Like CSBs, CPBs are offered for sale at most financial institutions in Canada.

CPBs offer a higher rate of interest at the time of issue compared to the CSB on sale at the same time, and are redeemable once a year on the anniversary date of the issue and during the 30 days thereafter without penalty. Once an issue date has passed, the announced interest rates for the posted period will not be changed. CPBs are available in both regular interest and compound interest forms. The compound interest bond is available for as little as $100 while the regular interest bond is available starting from $300. Principal and interest are fully backed by the Government of Canada and this bond is non-callable.

Canada Bills

Canada Bills are promissory notes denominated in US dollars and issued only in book-entry form. They mature not more than 270 days from their date of issue and are discount obligations with a minimum order size of US$1,000,000 and a minimum denomination of US$1,000. Delivery and payment for Canada Bills occur in same-day funds through Chase Manhattan Bank in New York City.

Primary distribution of Canada Bills occurs through five dealers: CIBC Wood Gundy Inc., CS First Boston, Goldman, Sachs & Co., Lehman Brothers and RBC Dominion Securities Inc. Rates on Canada Bills are posted daily for terms of one to six months.

Canada Bills are issued for foreign exchange reserve funding purposes only.

Canada Notes

Canada Notes are promissory notes usually denominated in US dollars and available in book-entry form. Canada Notes are issued in denominations of US$1,000 and integral multiples thereof. At present, the aggregate principal amount outstanding issued under the program is limited to US$10.0 billion. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate.

The interest rate or interest rate formula, issue price, stated maturity, redemption or repayment provisions, and any other terms are established by the Government of Canada at the time of issuance of the notes and will be indicated in the Pricing Supplement. Delivery and payment for Canada Notes occur through the Bank of New York.

The notes are offered on a continuous basis by the Government through five dealers: CS First Boston, Goldman, Sachs & Co., Lehman Brothers, Nesbitt Burns Inc. and Scotia Capital Markets. The Government may also sell notes to other dealers or directly to investors.

Canada Notes are issued for foreign exchange reserve funding purposes only.

Euro Medium-Term Notes

Euro Medium-Term Notes (EMTNs) are medium-term notes issued outside the United States and Canada. Government of Canada EMTNs are sold either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as the Government's agent for the particular transaction (called reverse inquiry). EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs is responsible for the sale of the notes) and on an intermittent basis.

The Arranger for the EMTN program is Morgan Stanley Dean Witter. The London-based dealer group includes CIBC World Markets plc, Goldman Sachs International, J.P. Morgan Securities Ltd., Nomura International, TD Securities, Deutsche Bank, Merrill Lynch International, Morgan Stanley Dean Witter, RBC Dominion Securities and Warburg Dillon Read.

The EMTN program further diversifies the sources of cost-effective funding for the foreign exchange reserves. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand.

Annex 3

Glossary

benchmark bond: Specific issue outstanding within each class of maturities. It is considered by the market to be the standard against which all other bonds issued in that class are evaluated.

bid: Price a buyer is willing to pay.

bid-offer spread: The difference between bid and offer prices. It is typically measured in basis points (hundredths of a per cent).

budgetary surplus: Occurs when government annual revenues exceed annual budgetary expenditures. A deficit is the shortfall between government revenues and budgetary spending.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar in the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

financial requirements/source: Measures the difference between the cash coming in to the Government and the cash going out. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet the Government's financing needs in any given year.

foreign exchange reserves: Stocks of foreign exchange assets (e.g. interest-earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

gross public debt: Total amount the Government owes. It consists of both market debt in the form of outstanding securities such as Treasury bills and Canada Savings Bonds, and internal debt owed mainly to the superannuation fund for government employees and other current liabilities.

interest-bearing debt: Consists of unmatured debt, or market debt, and the Government's liabilities to internally held accounts such as federal employees' pension plans.

market debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets, and consists of marketable bonds, Treasury bills, retail debt (primarily Canada Savings Bonds), foreign-currency-denominated bonds and bills, as well as bonds issued to the Canada Pension Plan.

marketable debt: Market debt that is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

net public debt: Consists of gross public debt, net of financial assets.

non-market debt: Consists of the Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt).

non-marketable debt: Market debt that is not tradable and that is issued to retail investors (Canada Savings Bonds and Canada Premium Bonds).

offer: Price at which a seller is willing to sell.

term structure of interest rates: The levels of interest rates from short- to long-term maturities.

turnover ratio: Volume of securities traded as a percentage of securities outstanding.

Reference Tables

Reference Table I

Gross Public Debt, Outstanding Market Debt and Debt Charges

	Gross public debt				Outstanding market debt			
Fiscal years ending March 31	Outstanding	Fixed-rate portion[1]	Average fixed-rate portion[2]	Total debt charges	Outstanding	Fixed-rate portion	Total debt charges	Average interest rate
	($ billions)	(%)	(%)	($ billions)	($ billions)	(%)	($ billions)	(%)
1985-86	274.8	51.9	0	25.4	201.2	36.7	20.7	10.66
1986-87	308.9	50.9	0	26.7	228.6	36.9	21.5	9.34
1987-88	340.1	51.2	0	29.0	250.8	38.2	23.1	9.61
1988-89	371.5	49.6	0	33.2	276.3	37.2	26.5	10.82
1989-90	397.2	49.9	0	38.8	294.6	38.1	31.4	11.20
1990-91	433.3	50.4	0	42.6	323.9	38.5	34.3	10.72
1991-92	467.4	50.7	0	41.2	351.9	38.9	32.4	8.86
1992-93	503.9	50.4	0	38.8	382.7	39.0	29.4	7.88
1993-94	546.4	53.3	0	38.0	414.0	42.7	28.0	6.75
1994-95	584.8	55.1	0	42.0	441.0	44.4	31.4	7.97
1995-96	624.7	56.9	0	46.9	469.5	47.9	35.3	7.34
1996-97	640.7	61.7	0	45.0	476.9	53.8	33.0	6.66
1997-98	638.5	63.7	0	40.9	467.3	56.8	31.0	6.64
1998-99	640.3	64.5	66.6	41.4	460.4	58.5	30.8	6.70
1999-00	638.7	66.5	66.6	41.6	456.4	59.1	30.5	6.15

Note: Variances in the maturity structure of the debt will cause the fixed ratio to vary modestly on a monthly basis.

[1] After adjusting for non-interest-bearing liabilities. Definition of fixed debt may vary slightly from year to year to accommodate changes in the debt structure.

[2] Comparative figures for prior years are not available.

Sources: *Public Accounts of Canada, Bank of Canada Review*, Department of Finance estimates.

Reference Table II

Government of Canada Outstanding Market Debt

Fiscal years ending March 31	Payable in Canadian dollars					Payable in foreign currencies						Total market debt
	Treasury bills	Marketable bonds	Retail debt	CPP bonds	Total	Marketable bonds	Canada Bills	Canada Notes[1]	Standby drawings	Term loans	Total	
	(C$ millions)											
1977-78	11,295	21,645	18,036	84	51,060	181	0	0	850	0	1,031	51,664
1978-79	13,535	26,988	19,443	96	60,062	3,319	0	0	2,782	1,115	7,216	66,640
1979-80	16,325	33,387	18,182	113	68,007	3,312	0	0	359	1,030	4,701	72,021
1980-81	21,770	40,976	15,966	136	78,848	3,236	0	0	355	1,046	4,637	83,138
1981-82	19,375	43,605	25,108	154	88,242	3,867	0	0	0	550	4,417	93,167
1982-83	29,125	48,473	32,753	171	110,522	4,872	0	0	0	362	5,234	116,562
1983-84	41,700	56,976	38,403	189	137,268	4,306	0	0	510	398	5,214	142,901
1984-85	52,300	69,354	42,167	205	164,026	4,972	0	0	1,909	1,172	8,053	172,719
1985-86	61,950	81,163	44,607	445	188,165	9,331	0	0	2,233	2,247	13,811	201,229
1986-87	76,950	94,520	43,854	1,796	217,120	9,120	1,045	0	0	2,047	12,212	228,611
1987-88	81,050	103,899	52,558	2,492	239,999	8,438	1,045	0	0	2,257	11,740	250,809
1988-89	102,700	115,748	47,048	3,005	268,501	6,672	1,131	0	0	934	8,737	276,301
1989-90	118,550	127,681	40,207	3,072	289,510	4,364	1,446	0	0	0	5,810	294,562
1990-91	139,150	143,601	33,782	3,492	320,025	3,555	1,008	0	0	0	4,563	323,903
1991-92	152,300	158,059	35,031	3,501	348,891	3,535	0	0	0	0	3,535	351,885
1992-93	162,050	178,436	33,884	3,505	377,875	2,926	2,552	0	0	0	5,478	382,741
1993-94	166,000	203,373	30,866	3,497	403,736	5,019	5,649	0	0	0	10,668	413,975
1994-95	164,450	225,513	30,756	3,488	424,207	7,875	9,046	0	0	0	16,921	440,998
1995-96	166,100	252,411	30,801	3,478	452,790	9,514	6,986	310	0	0	16,810	469,547
1996-97	135,400	282,059	32,911	3,468	453,838	12,460	8,436	2,121	0	0	23,017	476,852
1997-98	112,300	293,987	30,302	3,456	440,045	14,590	9,356	3,176	0	0	27,122	467,291
1998-99	96,950	294,914	28,810	4,063	424,737	19,655	10,171	6,182	0	0	36,008	460,427
1999-00	99,850	293,250	27,115	3,427	423,642	21,464	6,008	5,168	0	0	32,640	456,406

Note: Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

[1] Includes EMTNs.

Sources: *Bank of Canada Review*, Department of Finance.

Reference Table III

Average Weekly Domestic Market Trading in Government of Canada Securities, April 1999 to March 2000

		Marketable bonds					
	Treasury bills	3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	Total
				($ millions)			
April 1999	23,921	22,072	32,927	12,483	118	67,600	91,521
May 1999	25,024	30,533	38,873	13,099	206	82,711	107,735
June 1999	20,668	29,419	32,657	10,332	248	72,656	93,324
July 1999	22,153	19,902	26,847	8,963	142	55,854	78,007
August 1999	20,702	26,575	30,375	11,116	181	68,247	88,949
September 1999	24,794	29,433	30,489	8,597	281	68,800	93,594
October 1999	21,812	24,996	30,457	13,613	128	69,194	91,006
November 1999	25,088	26,809	35,593	10,838	420	73,660	98,748
December 1999	21,061	16,584	21,593	7,106	138	45,421	66,482
January 2000	19,177	24,376	26,786	8,493	238	59,893	79,070
February 2000	31,585	26,210	35,933	12,025	217	74,385	105,970
March 2000	29,127	27,907	30,925	9,948	322	69,102	98,229

Source: Bank of Canada, *Banking and Financial Statistics.*

Reference Table IV

Distribution of Domestic Holdings of Government of Canada Securities

PART A – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					($ millions)				
1976	17,932	395	8,242	8,666	716	1,436	2,273	730	40,390
1977	20,277	321	10,268	9.601	1,048	2,271	3,114	1,014	47,914
1978	22,737	403	12,001	9,896	1,537	3,738	4,020	1,721	56,053
1979	23,143	374	13,656	10,156	1,684	6,716	4,103	2,878	62,710
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,125	520	17,100	10,003	2,452	10,569	5,342	4,194	83,305
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,551	17,816	9,984	5,321	126,446
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,332	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,551
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,711	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207,250
1988	86,574	8,634	20,606	21,115	7,492	42,460	19,028	17,186	223,095
1989	84,649	11,402	21,133	19,804	9,854	46,037	23,850	17,840	234,569
1990	81,060	11,797	20,325	23,224	10,460	52,984	26,051	19,574	245,475
1991	74,880	11,580	22,370	35,792	12,091	55,846	33,054	21,015	266,628
1992	72,869	13,696	22,607	44,555	12,428	60,042	39,396	20,222	285,815
1993	63,163	10,359	23,498	60,242	11,229	69,917	45,321	16,397	300,126
1994	52,751	12,039	24,902	70,063	9,992	78,559	52,847	24,967	326,120
1995	46,128	12,048	23,590	76,560	10,947	87,484	59,244	26,324	342,325
1996	43,971	10,013	25,556	74,789	10,952	90,231	71,514	24,828	351,854
1997	38,983	10,470	27,198	67,715	7,054	95,102	78,796	25,429	350,747
1998	37,054	8,529	27,911	65,636	6,659	100,056	79,497	23,053	348,395
1999	36,813	9,285	29,075	54,724	7,048	108,582	81,311	27,990	354,828

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART B – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					(%)				
1976	44.40	0.98	20.41	21.46	1.77	3.56	5.63	1.81	100.00
1977	42.32	0.67	21.43	20.04	2.19	4.74	6.50	2.12	100.00
1978	40.56	0.72	21.41	17.65	2.74	6.67	7.17	3.07	100.00
1979	36.90	0.60	21.78	16.20	2.69	10.71	6.54	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.76	0.62	20.53	12.01	2.94	12.69	6.41	5.03	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.78	4.35	13.33	11.95	4.39	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.39	4.15	9.75	7.73	3.09	18.76	9.43	6.72	100.00
1988	38.81	3.87	9.24	9.46	3.36	19.03	8.53	7.70	100.00
1989	36.09	4.86	9.01	8.44	4.20	19.63	10.17	7.61	100.00
1990	33.02	4.81	8.28	9.46	4.26	21.58	10.61	7.97	100.00
1991	28.08	4.34	8.39	13.42	4.53	20.95	12.40	7.88	100.00
1992	25.50	4.79	7.91	15.59	4.35	21.01	13.78	7.08	100.00
1993	21.05	3.45	7.83	20.07	3.74	23.30	15.10	5.46	100.00
1994	16.18	3.69	7.64	21.48	3.06	24.09	16.20	7.66	100.00
1995	13.47	3.52	6.89	22.36	3.20	25.56	17.31	7.69	100.00
1996	12.50	2.85	7.26	21.26	3.11	25.64	20.32	7.06	100.00
1997	11.11	2.99	7.75	19.31	2.01	27.11	22.47	7.25	100.00
1998	10.64	2.45	8.01	18.84	1.91	28.72	22.82	6.62	100.00
1999	10.37	2.62	8.19	15.42	1.99	30.60	22.92	7.89	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART C – Treasury Bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					($ millions)				
1976	171	125	1,964	4,219	52	44	515	193	7,283
1977	394	136	2,461	4,949	143	98	1,020	311	9,512
1978	576	198	3,567	5,517	193	261	1,554	519	12,385
1979	785	165	4,345	6,690	65	245	1,550	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,180	2,587	5,376	1,286	36,815
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,712	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,246
1988	20,196	7,414	9,945	15,224	5,614	7,648	9,133	7,726	82,900
1989	32,638	9,668	11,124	16,410	8,116	7,664	12,408	9,251	107,279
1990	37,743	10,756	10,574	16,841	8,976	11,737	12,998	9,388	119,013
1991	32,358	10,437	13,093	24,382	9,089	10,386	17,636	10,417	127,798
1992	34,840	11,254	14,634	27,989	9,646	11,639	19,907	8,726	138,635
1993	29,401	9,657	16,876	29,901	9,222	17,085	22,336	5,151	139,629
1994	17,476	8,499	18,973	30,415	6,879	14,385	22,021	10,631	129,279
1995	13,767	9,204	18,298	30,865	7,760	15,321	25,183	10,603	131,001
1996	8,024	8,285	17,593	23,470	5,493	13,530	32,752	6,264	115,411
1997	3,158	6,858	14,233	19,448	3,133	8,956	33,200	4,354	93,340
1998	1,204	6,219	10,729	15,974	2,392	4,570	32,716	1,654	75,458
1999	9,044	6,731	8,584	9,062	2,776	7,443	36,356	2,970	82,966

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART D – Treasury Bills and Canada Bills

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[1]
					(%)				
1976	2.35	1.72	26.97	57.93	0.71	0.60	7.07	2.65	100.00
1977	4.14	1.43	25.87	52.03	1.50	1.03	10.72	3.27	100.00
1978	4.65	1.60	28.80	44.55	1.56	2.11	12.55	4.19	100.00
1979	5.34	1.12	29.58	45.55	0.44	1.67	10.55	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.23	13.98	7.05	34.98	8.64	7.03	14.60	3.49	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.58	10.44	13.98	16.60	5.38	6.94	13.85	7.22	100.00
1988	24.36	8.94	12.00	18.36	6.77	9.23	11.02	9.32	100.00
1989	30.42	9.01	10.37	15.30	7.57	7.14	11.57	8.62	100.00
1990	31.71	9.04	8.88	14.15	7.54	9.86	10.92	7.89	100.00
1991	25.32	8.17	10.25	19.08	7.11	8.13	13.80	8.15	100.00
1992	25.13	8.12	10.56	20.19	6.96	8.40	14.36	6.29	100.00
1993	21.06	6.92	12.09	21.41	6.60	12.24	16.00	3.69	100.00
1994	13.52	6.57	14.68	23.53	5.32	11.13	17.03	8.22	100.00
1995	10.51	7.03	13.97	23.56	5.92	11.70	19.22	8.09	100.00
1996	6.95	7.18	15.24	20.34	4.76	11.72	28.38	5.43	100.00
1997	3.38	7.35	15.25	20.84	3.36	9.60	35.57	4.66	100.00
1998	1.60	8.24	14.22	21.17	3.17	6.06	43.36	2.19	100.00
1999	10.90	8.11	10.35	10.92	3.35	8.97	43.82	3.58	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART E – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	1,277	270	6,278	4,447	664	1,392	1,758	537	16,623
1977	1,690	185	7,807	4,652	905	2,173	2,094	703	20,209
1978	1,926	205	8,434	4,379	1,344	3,477	2,466	1,202	23,433
1979	3,736	209	9,311	3,466	1,619	6,471	2,553	2,035	29,400
1980	4,890	267	10,541	2,502	2,152	8,814	3,130	2,736	35,032
1981	6,759	151	11,669	1,406	2,109	10,009	3,155	3,112	38,370
1982	7,374	337	12,945	1,199	1,931	11,907	4,169	3,455	43,317
1983	6,813	356	14,264	2,228	2,371	15,229	4,608	4,035	49,904
1984	9,906	508	13,669	2,167	2,095	20,163	5,434	4,668	58,610
1985	11,483	870	11,683	2,569	2,055	27,144	6,957	5,970	68,731
1986	9,827	1,384	10,407	2,618	2,568	31,295	8,250	7,877	74,226
1987	10,959	1,359	10,519	4,514	2,675	34,064	9,958	8,916	82,964
1988	11,501	1,220	10,661	5,891	1,878	34,812	9,895	9,460	85,318
1989	8,313	1,734	10,009	3,394	1,738	38,373	11,442	8,589	83,592
1990	7,874	1,041	9,751	6,383	1,484	41,247	13,053	10,186	91,019
1991	5,215	1,143	9,277	11,410	3,002	45,460	15,418	10,598	101,523
1992	2,147	2,442	7,973	16,566	2,782	48,403	19,489	11,496	111,298
1993	1,140	702	6,622	30,341	2,007	52,832	22,985	11,246	127,875
1994	1,764	3,540	5,929	39,648	3,113	64,174	30,826	14,336	163,330
1995	3	2,844	5,292	45,695	3,187	72,163	34,061	15,721	178,966
1996	1,557	1,728	7,963	51,319	5,459	76,701	38,762	18,564	202,053
1997	4,537	3,612	12,965	48,267	3,921	86,146	45,596	21,075	226,119
1998	7,520	2,310	17,182	49,662	4,267	95,486	46,781	21,399	244,607
1999	222	2,554	20,491	45,662	4,272	101,139	44,955	25,020	244,315

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART F – Bonds[1]

Year end	Persons and unincorporated business	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					(%)				
1976	7.68	1.62	37.77	26.75	3.99	8.37	10.58	3.23	100.00
1977	8.36	0.92	38.63	23.02	4.48	10.75	10.36	3.48	100.00
1978	8.22	0.87	35.99	18.69	5.74	14.84	10.52	5.13	100.00
1979	12.71	0.71	31.67	11.79	5.51	22.01	8.68	6.92	100.00
1980	13.96	0.76	30.09	7.14	6.14	25.16	8.93	7.81	100.00
1981	17.62	0.39	30.41	3.66	5.50	26.09	8.22	8.11	100.00
1982	17.02	0.78	29.88	2.77	4.46	27.49	9.62	7.98	100.00
1983	13.65	0.71	28.58	4.46	4.75	30.52	9.23	8.09	100.00
1984	16.90	0.87	23.32	3.70	3.57	34.40	9.27	7.96	100.00
1985	16.71	1.27	17.00	3.74	2.99	39.49	10.12	8.69	100.00
1986	13.24	1.86	14.02	3.53	3.46	42.16	11.11	10.61	100.00
1987	13.21	1.64	12.68	5.44	3.22	41.06	12.00	10.75	100.00
1988	13.48	1.43	12.50	6.90	2.20	40.80	11.60	11.09	100.00
1989	9.94	2.07	11.97	4.06	2.08	45.91	13.69	10.27	100.00
1990	8.65	1.14	10.71	7.01	1.63	45.32	14.34	11.19	100.00
1991	5.14	1.13	9.14	11.24	2.96	44.78	15.19	10.44	100.00
1992	1.93	2.19	7.16	14.88	2.50	43.49	17.51	10.33	100.00
1993	0.89	0.55	5.18	23.73	1.57	41.32	17.97	8.79	100.00
1994	1.08	2.17	3.63	24.27	1.91	39.29	18.87	8.78	100.00
1995	0.00	1.59	2.96	25.53	1.78	40.32	19.03	8.78	100.00
1996	0.77	0.86	3.94	25.40	2.70	37.96	19.18	9.19	100.00
1997	2.01	1.60	5.73	21.35	1.73	38.10	20.16	9.32	100.00
1998	3.07	0.94	7.02	20.30	1.74	39.04	19.12	8.75	100.00
1999	0.09	1.05	8.39	18.69	1.75	41.40	18.40	10.24	100.00

Note: Because of timing and valuation differences, the *National Balance Sheet Accounts* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report are on a par value basis – that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

1 Includes bonds denominated in foreign currencies.

2 Includes Quebec savings banks, credit unions and caisses populaires, trust companies and mortgage loan companies.

3 Includes investment dealers, mutual funds, property and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

4 Includes federal government holdings of its own debt, provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

5 May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts.*

Reference Table V
Non-Resident (Direct) Holdings of Government of Canada Debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada Bills	Total	Total as per cent of total market debt
		(C$ billions)		
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	8.7
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.6
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.0
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.5
1987	30.3	4.7	35.0	15.3
1988	33.0	9.3	42.3	16.9
1989	41.3	15.7	57.0	20.6
1990	49.9	13.3	63.2	21.5
1991	57.6	16.1	73.7	22.8
1992	63.6	23.0	86.6	24.6
1993	80.1	28.3	108.4	28.3
1994	79.3	34.0	113.3	27.4
1995	73.7	39.2	112.9	25.6
1996	84.1	37.7	121.8	25.9
1997	91.5	28.7	120.2	25.2
1998	94.1	22.4	116.5	24.9
1999	85.9	21.8	107.7	23.4
2000	84.6	16.6	101.2	22.2

Note: Numbers may not add due to rounding.

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities.*

Reference Table VI

Fiscal 1999-2000 Treasury Bill Program

Settlement	Maturing					New issues					Net increment			Average tender yields			
Date	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
								($ millions)							(%)		
01-Apr-99	4,750	3,300	–	3,300	11,350	–	4,200	1,900	1,900	8,000	-3,350	-3,350	93,600		4.75	4.86	4.97
15-Apr-99	2,500	3,600	3,000	–	9,100	–	3,700	1,700	1,700	7,100	-2,000	-5,350	91,600		4.46	4.54	4.60
29-Apr-99	2,500	3,800	–	2,900	9,200	3,700	3,600	1,600	1,600	10,500	1,300	-4,050	92,900	4.812-4.919	4.60	4.67	4.73
06-May-99	1,200	–	–	–	1,200	–	–	–	–		-1,200	-5,250	91,700				
13-May-99	2,500	4,000	3,000	–	9,500	–	3,200	1,400	1,400	6,000	-3,500	-8,750	88,200		4.30	4.43	4.56
27-May-99	–	4,200	–	2,600	6,800	–	2,800	1,400	1,400	5,600	-1,200	-9,950	87,000		4.42	4.60	4.79
10-Jun-99	–	4,400	3,000	–	7,400	–	2,800	1,500	1,500	5,800	-1,600	-11,550	85,400		4.54	4.78	5.07
23-Jun-99	–	4,400	–	2,700	7,100	–	3,100	1,600	1,600	6,300	-800	-12,350	84,600		4.62	4.88	5.15
08-Jul-99	–	4,200	3,100	–	7,300	–	3,500	1,700	1,700	6,900	-400	-12,750	84,200		4.61	4.84	5.15
22-Jul-99	–	3,700	–	3,100	6,800	–	4,000	1,800	1,800	7,600	800	-11,950	85,000		4.64	4.81	5.19
29-Jul-99	–	–	–	–	–	2,750	–	–	–	2,750	2,750	-9,200	87,750	4.70			
05-Aug-99	2,750	3,600	3,700	–	10,050	–	4,100	1,900	1,900	7,900	-2,150	-11,350	85,600		4.76	4.88	5.28
19-Aug-99	–	3,200	–	3,100	6,300	–	4,200	2,000	2,000	8,200	1,900	-9,450	87,500		4.84	5.06	5.36
26-Aug-99	–	–	–	–	–	2,000	–	–	–	2,000	2,000	-7,450	89,500	4.68			
02-Sep-99	2,000	2,800	4,200	–	9,000	1,500	4,200	2,000	2,000	9,700	700	-6,750	90,200	4.71	4.83	5.08	5.38
16-Sep-99	–	2,800	–	2,800	5,600	–	4,200	2,000	2,000	8,200	2,600	-4,150	92,800		4.74	4.99	5.32
30-Sep-99	1,500	3,100	3,600	–	8,200	750	4,000	1,900	1,900	8,550	350	-3,800	93,150	4.59	4.69	4.87	5.15
07-Oct-99	750	–	–	–	750	–	–	–	–	–	-750	-4,550	92,400				
14-Oct-99	–	3,500	–	2,800	6,300	–	3,800	1,800	1,800	7,400	1,100	-3,450	93,500		4.74	5.09	5.49
28-Oct-99	–	4,000	3,000	–	7,000	–	3,600	1,600	1,600	6,800	-200	-3,650	93,300		4.85	5.20	5.73
10-Nov-99	–	4,100	–	2,800	6,900	–	3,600	1,600	1,600	6,800	-100	-3,750	93,200		4.90	5.19	5.64
25-Nov-99	–	4,200	2,900	–	7,100	–	3,600	1,600	1,600	6,800	-300	-4,050	92,900		4.82	5.10	5.55
09-Dec-99	–	4,200	–	2,800	7,000	–	3,900	1,700	1,700	7,300	300	-3,750	93,200		4.71	5.09	5.65
16-Dec-99	–	–	–	–	–	1,750	–	–	–	1,750	1,750	-2,000	94,950	4.86			
23-Dec-99	–	4,200	3,300	–	7,500	–	3,200	1,400	1,400	6,000	-1,500	-3,500	93,450		4.93	5.29	5.77
06-Jan-00	–	4,000	–	3,100	7,100	–	3,600	1,700	1,700	7,000	-100	-3,600	93,350		4.99	5.36	5.83
13-Jan-00	1,750	–	–	–	1,750	–	–	–	–	–	-1,750	-5,350	91,600				
20-Jan-00	–	3,800	3,700	–	7,500	–	3,800	1,800	1,800	7,400	-100	-5,450	91,500		5.08	5.39	5.91
03-Feb-00	–	3,600	–	3,500	7,100	–	3,800	1,800	1,800	7,400	300	-5,150	91,800		5.21	5.49	5.98
10-Feb-00	–	–	–	–	–	–	–	–	–	–	–	-5,150	91,800				
17-Feb-00	–	3,600	4,000	–	7,600	–	3,800	1,800	1,800	7,400	-200	-5,350	91,600		5.10	5.39	5.85
24-Feb-00	–	–	–	–	–	–	–	–	–	–	–	-5,350	91,600				
02-Mar-00	–	3,600	–	4,000	7,600	–	4,000	1,800	1,800	7,600	–	-5,350	91,600		5.05	5.42	5.83
16-Mar-00	–	3,900	3,900	–	7,800	2,750	4,200	1,800	1,800	10,550	2,750	-2,600	94,350	5.08	5.16	5.46	5.87
23-Mar-00	–	–	–	–	–	2,500	–	–	–	2,500	2,500	-100	96,850	5.19			
30-Mar-00	–	3,200	–	3,600	6,800	2,000	4,200	1,800	1,800	9,800	3,000	2,900	99,850	5.21	5.28	5.56	5.94
Total	**22,200**	**101,000**	**44,400**	**43,100**	**210,700**	**19,700**	**100,700**	**46,600**	**46,600**	**213,600**	**2,900**	**–**	**99,850**				

[1] Cash management bill.

[2] Outstanding.

Source: Bank of Canada.

Reference Table VII

Fiscal 1999-2000 Treasury Bill Auction Results

Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail	Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail
	(months)	($ millions)	($)	(%)		(basis points)		(months)	($ millions)	($)	(%)		(basis points)
13-Apr-1999	3	3,700	98.816	4.461	1.91	1.3	12-Oct-1999	3	3,800	98.745	4.735	2.01	0.5
	6	1,700	97.955	4.535	2.10	0.5		6	1,800	97.523	5.094	2.19	0.6
	12	1,700	95.780	4.595	1.79	1.1		12	1,800	94.808	5.491	1.77	1.3
27-Apr-1999	3	3,600	98.780	4.601	2.17	0.9	26-Oct-1999	3	3,600	98.715	4.85	1.71	1.5
	6	1,600	97.727	4.665	2.39	0.5		6	1,600	97.662	5.202	1.93	0.7
	12	1,600	95.497	4.728	1.97	0.7		12	1,600	94.796	5.725	1.67	2.0
11-May-1999	3	3,200	98.859	4.3	2.41	0.4	09-Nov-1999	3	3,600	98.689	4.897	1.69	1.6
	6	1,400	98.003	4.428	2.80	0.2		6	1,600	97.464	5.189	2.10	0.5
	12	1,400	95.813	4.557	2.08	0.3		12	1,600	94.664	5.637	2.00	1.0
25-May-1999	3	2,800	98.827	4.42	1.97	1.0	23-Nov-1999	3	3,600	98.724	4.815	2.16	0.4
	6	1,400	97.756	4.603	2.00	1.7		6	1,600	97.705	5.103	2.35	0.6
	12	1,400	95.439	4.792	1.77	0.8		12	1,600	94.946	5.551	1.92	0.7
08-Jun-1999	3	2,800	98.795	4.541	1.88	0.7	07-Dec-1999	3	3,900	98.751	4.709	2.18	0.7
	6	1,500	97.846	4.782	1.90	1.0		6	1,700	97.526	5.088	1.98	1.0
	12	1,500	95.365	5.069	1.86	0.9		12	1,700	94.667	5.649	2.49	0.3
22-Jun-1999	3	3,100	98.762	4.622	1.82	1.0	21-Dec-1999	3	3,200	98.694	4.93	1.52	5.0
	6	1,600	97.613	4.877	1.90	1.1		6	1,400	97.625	5.285	1.86	1.5
	12	1,600	95.105	5.147	1.79	0.6		12	1,400	94.755	5.773	1.95	0.7
06-Jul-1999	3	3,500	98.778	4.606	1.85	0.8	05-Jan-2000	3	3,600	98.677	4.993	1.53	1.7
	6	1,700	97.819	4.843	2.01	0.4		6	1,700	97.398	5.357	1.48	1.3
	12	1,700	95.298	5.146	1.37	1.4		12	1,700	94.507	5.81	1.81	1.7
20-Jul-1999	3	4,000	98.771	4.636	1.85	0.9	18-Jan-2000	3	3,800	98.655	5.076	1.80	1.8
	6	1,800	97.657	4.812	2.24	0.3		6	1,800	97.578	5.393	1.88	1.1
	12	1,800	95.082	5.187	2.30	0.4		12	1,800	94.637	5.91	1.76	1.5
03-Aug-1999	3	4,100	98.751	4.761	1.73	0.9	01-Feb-2000	3	3,800	98.621	5.207	1.87	1.5
	6	1,900	97.804	4.878	1.81	1.7		6	1,800	97.335	5.49	1.70	2.6
	12	1,900	95.178	5.283	1.78	1.2		12	1,800	94.375	5.977	2.09	0.2
17-Aug-1999	3	4,200	98.718	4.838	1.53	2.0	15-Feb-2000	3	3,800	98.649	5.101	1.97	0.8
	6	2,000	97.541	5.055	1.67	1.5		6	1,800	97.579	5.391	1.80	1.7
	12	2,000	94.925	5.361	1.61	1.4		12	1,800	94.688	5.851	2.09	1.4
31-Aug-1999	3	4,200	98.719	4.834	1.85	1.4	29-Feb-2000	3	4,000	98.662	5.051	1.92	1.6
	6	2,000	97.715	5.081	1.35	2.9		6	1,800	97.369	5.418	1.93	1.4
	12	2,000	95.097	5.377	1.39	2.3		12	1,800	94.508	5.827	1.44	1.8
14-Sep-1999	3	4,200	98.744	4.737	1.65	0.7	14-Mar-2000	3	4,200	98.634	5.16	1.83	0.7
	6	2,000	97.574	4.987	2.25	0.8		6	1,800	97.548	5.462	2.11	1.4
	12	2,000	94.959	5.323	1.89	1.5		12	1,800	94.671	5.87	1.94	0.7
28-Sep-1999	3	4,000	98.757	4.687	1.80	1.1	28-Mar-2000	3	4,200	98.603	5.277	1.78	0.8
	6	1,900	97.809	4.867	1.83	1.5		6	1,800	97.301	5.563	1.97	1.5
	12	1,900	95.298	5.145	1.85	1.3		12	1,800	94.407	5.941	2.03	0.7
							Total		185,900				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

Source: Bank of Canada.

Reference Table VIII

Fiscal 1999-2000 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Fixed-coupon bonds						
1999	**1999**					
April 28	May 3	June 1, 2029		1,800		1,800
May 12	May 17	June 1, 2009		2,500		2,500
May 26	June 1	September 1, 2004		2,750		2,750
May 26	June 1				563	-563
June 9	June 15	December 1, 2001		3,500		3,500
	August 2*		5,600	0		-5,600
July 28	August 3	June 1, 2010		2,600		2,600
July 29	August 3				600	-600
August 11	August 16	September 1, 2004		2,800		2,800
	September 1*		8,500	0		-8,500
September 8	September 15	December 1, 2001	7,000	3,500		-3,500
September 29	October 1	September 1, 2004		2,800		2,800
October 13	October 15	June 1, 2029	528	1,900		1,373
October 27	November 1	June 1, 2010		2,600		2,600
November 10	November 15	September 1, 2005		2,800		2,800
November 10	November 15				500	-500
November 24	December 1	June 1, 2002	3,225	3,600		375
November 24	December 1				600	-600
2000	**2000**					
January 26	February 1	June 1, 2010	5,500	2,600		-2,900
January 26	February 1				500	-500
February 9	February 15	September 1, 2005		2,800		2,800
	March 1*		6,500	0		-6,500
March 8	March 15	June 1, 2002	8,050	3,600		-4,450
March 8	March 15				500	-500
March 15	March 20	June 1, 2010		2,600		2,600
Real return bonds						
1999	**1999**					
June 2	June 8	December 1, 2031		300		300
September 1	September 7	December 1, 2031		300		300
December 1	December 6	December 1, 2031		300		300
2000	**2000**					
March 1	March 6	December 1, 2031		350		350
Total fiscal year 1999-2000			**44,903**	**46,000**	**3,263**	**-2,166**

* Maturing date

Source: Bank of Canada.

Reference Table IX

Fiscal 1999-2000 Marketable Bond Auction Results

Auction date	Term	Maturity date	Coupon rate	Issue amount	Average price	Average yield	Auction coverage	Tail
	(years)		(%)	($ millions)	($)	(%)		(basis points)
28-Apr-1999	30	01-Jun-2029	5.75	1,800	105.773	5.361	2.65	0.4
12-May-1999	10	01-Jun-2009	5.50	2,500	101.322	5.328	2.62	0.6
26-May-1999	5	01-Sep-2004	5.00	2,750	98.117	5.415	2.51	0.5
02-Jun-1999	30	01-Dec-2031	4.00*	300	98.567	4.080	3.58	n.a.
09-Jun-1999	2	01-Dec-2001	5.25	3,500	99.509	5.467	2.52	0.7
28-Jul-1999	10	01-Jun-2010	5.50	2,600	98.631	5.672	2.46	0.4
11-Aug-1999	5	01-Sep-2004	5.00	2,800	95.998	5.929	2.57	0.3
01-Sep-1999	30	01-Dec-2031	4.00*	300	99.456	4.030	2.81	n.a.
08-Sep-1999	2	01-Dec-2001	5.25	3,500	99.539	5.471	2.50	0.7
29-Sep-1999	5	01-Sep-2004	5.00	2,800	97.267	5.643	2.48	1.2
13-Oct-1999	30	01-Jun-2029	5.75	1,900	94.465	6.158	2.10	2.7
27-Oct-1999	10	01-Jun-2010	5.50	2,600	93.288	6.382	2.30	0.8
10-Nov-1999	5	01-Sep-2005	6.00	2,800	99.779	6.048	2.60	0.3
24-Nov-1999	2	01-Jun-2002	5.75	3,600	99.594	5.927	2.60	0.5
01-Dec-1999	30	01-Dec-2031	4.00*	300	99.641	4.020	3.30	n.a.
26-Jan-2000	10	01-Jun-2010	5.50	2,600	92.899	6.451	2.50	0.3
09-Feb-2000	5	01-Sep-2005	6.00	2,800	97.681	6.505	2.30	1.0
01-Mar-2000	30	01-Dec-2031	4.00*	350	100.354	3.980	3.10	n.a.
08-Mar-2000	2	01-Jun-2002	5.75	3,600	99.542	5.969	2.30	0.7
15-Mar-2000	10	01-Jun-2010	5.50	2,600	95.790	6.058	2.00	3.2
Total				**46,000**				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

* Real return bonds.

Source: Department of Finance.

Reference Table X

Bond Buyback Program – Operations 1999-2000

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
26-May-1999	01-Oct-2003	9.50	85.8
	01-Feb-2004	10.25	8.6
	01-Jun-2004	13.50	8.0
	01-Oct-2004	10.50	164.1
	01-Mar-2005	12.00	132.1
	01-Sep-2005	12.25	164.6
	Total		**563.2**
28-Jul-1999	01-Jun-2009	11.00	195.4
	01-Oct-2009	10.75	21.8
	01-Mar-2010	9.75	25.0
	01-Jun-2010	9.50	93.4
	01-Oct-2010	8.75	45.5
	01-Mar-2011	9.00	165.7
	01-Jun-2011	8.50	53.2
	Total		**600.0**
10-Nov-1999	01-Mar-2005	12.00	330.0
	01-Sep-2005	12.25	130.0
	01-Oct-2006	14.00	40.0
	Total		**500.0**
24-Nov-1999	01-Oct-2001	9.50	245.4
	01-May-2002	10.00	7.3
	15-Dec-2002	11.25	122.9
	01-Feb-2003	11.75	224.4
	Total		**600.0**
26-Jan-2000	01-Oct-2009	10.75	125.0
	01-Jun-2010	9.50	312.4
	01-Oct-2010	8.75	28.0
	01-Mar-2011	9.00	17.0
	01-Jun-2011	8.50	17.6
	Total		**500.0**
08-Mar-2000	01-Oct-2001	9.50	73.8
	15-Mar-2002	15.50	10.9
	01-May-2002	10.00	11.9
	15-Dec-2002	11.25	94.9
	01-Feb-2003	11.75	308.5
	Total		**500.0**
Total buyback program for 1999-2000			**3,263.2**

Source: Department of Finance.

Reference Table XI

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2000

Maturity date rate	Amount	Coupon rate	Maturity date	Amount	Coupon
	($ millions)	(%)		($ millions)	(%)
Fixed-coupon					
01-May-2000	1,575.0	9.75	01-Oct-2004	710.9	10.50
01-Jul-2000	2,900.0	10.50	01-Dec-2004	7,700.0	9.00
01-Jul-2000	175.0	15.00	01-Mar-2005	1,312.9	12.00
01-Sep-2000	7,600.0	7.50	01-Sep-2005	5,600.0	6.00
01-Sep-2000	1,200.0	11.50	01-Sep-2005	1,080.4	12.25
01-Dec-2000	7,000.0	5.00	01-Dec-2005	8,000.0	8.75
15-Dec-2000	500.0	9.75	01-Mar-2006	975.0	12.50
01-Feb-2001	425.0	15.75	01-Oct-2006	985.0	14.00
01-Mar-2001	9,400.0	7.50	01-Dec-2006	9,100.0	7.00
01-Mar-2001	3,175.0	10.50	01-Mar-2007	325.0	13.75
01-May-2001	1,325.0	13.00	01-Jun-2007	9,500.0	7.25
01-Jun-2001	7,000.0	4.50	01-Oct-2007	700.0	13.00
01-Jun-2001	3,550.0	9.75	01-Mar-2008	750.0	12.75
01-Sep-2001	10,600.0	7.00	01-Jun-2008	9,200.0	6.00
01-Oct-2001	987.4	9.50	01-Jun-2008	3,257.9	10.00
01-Dec-2001	7,000.0	5.25	01-Oct-2008	644.8	11.75
01-Dec-2001	3,850.0	9.75	01-Mar-2009	400.0	11.50
01-Feb-2002	213.0	8.75	01-Jun-2009	9,400.0	5.50
15-Mar-2002	350.0	15.50	01-Jun-2009	672.8	11.00
01-Apr-2002	5,450.0	8.50	01-Oct-2009	1,077.3	10.75
01-May-2002	1,842.7	10.00	01-Mar-2010	300.0	9.75
01-Jun-2002	7,200.0	5.75	01-Jun-2010	10,400.0	5.50
01-Sep-2002	10,200.0	5.50	01-Jun-2010	2,474.3	9.50
15-Dec-2002	1,316.8	11.25	01-Oct-2010	251.5	8.75
01-Feb-2003	2,402.3	11.75	01-Mar-2011	1,792.3	9.00
01-Jun-2003	6,900.0	7.25	01-Jun-2011	679.1	8.50
01-Sep-2003	9,700.0	5.25	15-Mar-2014	3,150.0	10.25
01-Oct-2003	558.9	9.50	01-Jun-2015	2,350.0	11.25
01-Dec-2003	8,800.0	7.50	31-Dec-2019	22.3	10.19
01-Feb-2004	1,976.9	10.25	15-Mar-2021	1,800.0	10.50
01-Jun-2004	7,900.0	6.50	01-Jun-2021	4,650.0	9.75
01-Jun-2004	541.0	13.50	01-Jun-2022	2,550.0	9.25
01-Sep-2004	10,850.0	5.00	01-Jun-2023	8,200.0	8.00

Reference Table XI *(cont'd)*
Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2000

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	($ millions)	(%)		($ millions)	(%)
Fixed-coupon			**Real return bonds**		
01-Jun-2025	8,900.0	9.00	01-Dec-2021	5,175.0	4.25
01-Jun-2027	9,600.0	8.00	01-Dec-2026	5,250.0	4.25
01-Jun-2029	8,200.0	5.75	01-Dec-2031	1,650.0	4.00
Total	**281,175**		**Total**[1]	**12,075**	

[1] Real return bond figures show gross issue amount only – the consumer price index adjustment is not shown here.

Source: Bank of Canada.

Reference Table XII

Government of Canada Swaps Outstanding as at March 31, 2000

Domestic interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	($ millions)
01-Jun-2000	9.75	250
01-Feb-2004	10.25	50
Total		**300**

Foreign interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	(US$ millions)
22-Jan-2002	5.125	300
19-Nov-2007	4.00	25
05-Nov-2008	5.25	200
05-Nov-2008	5.25	500
05-Nov-2008	5.25	500
Total		**1,525**

Cross-currency swaps of foreign obligations

Maturity date	Notional amount
	(US$ millions)
02-Oct-2000	3
02-Oct-2000	3
02-Oct-2000	3
02-Oct-2000	3
02-Oct-2000	3
02-Oct-2000	3
12-Jun-2001	26
16-Jul-2003	65
26-Nov-2004	495
26-Nov-2004	341
30-Nov-2004	63
30-Nov-2004	25
22-Dec-2004	76
03-Oct-2007	319
31-Jan-2008	44
Total	**1,472**

Reference Table XII *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2000

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	($ millions)			($ millions)	
01-Sep-2002	250	USD	01-Mar-2005	565	USD
04-Sep-2002	1,000	USD	01-Sep-2005	100	USD
01-Apr-2002	50	USD	23-Nov-2005	150	USD
01-May-2002	100	USD	01-Dec-2005	194	EUR
01-Sep-2002	750	USD	01-Dec-2005	650	USD
03-Sep-2002	250	USD	01-Mar-2006	96	EUR
28-Oct-2002	100	USD	01-Mar-2006	50	USD
15-Dec-2002	103	EUR	01-Oct-2006	100	USD
15-Dec-2002	600	USD	30-Oct-2006	250	USD
01-Feb-2003	52	EUR	23-Nov-2006	150	USD
01-Jun-2003	54	EUR	01-Dec-2006	50	EUR
01-Jun-2003	125	USD	01-Jun-2007	206	EUR
01-Sep-2003	105	EUR	01-Jun-2007	750	USD
01-Sep-2003	150	USD	01-Oct-2007	153	EUR
01-Oct-2003	182	EUR	01-Mar-2008	475	USD
01-Oct-2003	65	USD	01-Jun-2008	800	USD
30-Nov-2003	100	USD	30-Sep-2008	50	USD
01-Dec-2003	155	EUR	01-Oct-2008	190	USD
01-Dec-2003	520	USD	01-Mar-2009	535	USD
01-Feb-2004	525	USD	01-Jun-2009	505	USD
30-Mar-2004	100	USD	01-Oct-2009	458	EUR
01-Jun-2004	518	EUR	01-Mar-2010	48	EUR
01-Jun-2004	350	USD			
01-Sep-2004	52	EUR	**Total**	**13,216**	
01-Oct-2004	211	EUR			
01-Oct-2004	125	USD			
23-Nov-2004	100	USD			

[1] Refers to the coupon of the underlying bond that was swapped.

Source: Department of Finance.

Reference Table XIII

Canada Savings Bonds and Canada Premium Bonds, Fiscal 1983-1984 to Fiscal 1999-2000

Fiscal year	Gross sales	Net change	Outstanding at fiscal year end
		($ millions)	
1983-84	11,584	5,650	38,403
1984-85	12,743	3,764	42,167
1985-86	15,107	2,440	44,607
1986-87	9,191	-22	44,585
1987-88	17,450	8,921	53,506
1988-89	14,962	-5,456	48,050
1989-90	9,338	-6,813	41,237
1990-91	6,720	-6,500	34,737
1991-92	9,588	1,151	35,888
1992-93	9,235	-1,172	34,716
1993-94	5,364	-3,089	31,627
1994-95	7,506	-96	31,531
1995-96	4,612	10	31,541
1996-97	5,747	2,050	33,591
1997-98	4,951	-2,796	30,795
1998-99	4,844	-2,187	28,608
1999-00	2,669	-1,510	27,098

Note: Figures are in accordance with Bank of Canada audited reports, which may vary from Public Accounts reports due to differences in classification.

Source: Bank of Canada.

Reference Table XIV

Crown Corporation Borrowings as at March 31, 2000

Borrowings from the market

Corporation	1992	1993	1994	1995	1996	1997	1998	1999	2000
				($ millions)					
Export Development Corporation	6,220	6,983	7,793	7,515	7,673	7,820	10,077	12,967	16,888
Canadian Wheat Board	7,323	6,966	7,283	7,321	6,377	6,474	6,698	6,786	542
Business Development Bank of Canada	2,249	2,352	2,602	2,723	3,045	3,371	3,839	4,223	4,723
Farm Credit Corporation	813	797	863	990	1,582	1,926	3,026	4,317	5,083
Canadian National[1]	1,803	1,905	2,249	2,331	–	–	–	–	–
Canada Mortgage and Housing Corporation	96	152	1,573	3,630	5,906	7,866	9,934	10,633	10,801
Canada Development Investment Corporation	713	594	473	–	–	–	–	–	–
Petro-Canada Ltd.	980	455	501	504	490	432	443	471	338
Petro-Canada[1]	–	–	–	–	–	–	–	–	–
Canada Ports Corporation	200	188	–	–	–	–	3d	79	69
Other	96	97	239	235	297	226	258	222	196
Total	**20,493**	**20,489**	**23,576**	**25,249**	**25,370**	**28,115**	**34,278**	**39,698**	**38,640**

[1] This corporation is no longer a Crown corporation.

Source: *Public Accounts of Canada*.

Borrowings from the Consolidated Revenue Fund

Corporation	1992	1993	1994	1995	1996	1997	1998	1999	2000
				($ millions)					
Canada Mortgage and Housing Corporation	8,419	8,181	8,075	7,835	7,263	6,938	6,708	6,298	6,152
Canada Deposit Insurance Corporation	1,785	3,085	3,151	2,160	1,627	855	395	–	–
Farm Credit Corporation	2,491	2,420	2,488	2,524	2,310	2,507	1,877	1,041	805
Other	975	819	415	307	233	204	179	551	77
Total	**13,670**	**14,505**	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**	**7,890**	**7,034**

Note: Figures do not include "allowance for valuation."

Source: Public Works and Government Services Canada data.

Debt Management Report

2000-2001

Canada

DEBT MANAGEMENT REPORT

2000-2001

Department of Finance Canada
Ministère des Finances Canada

Available from the

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Table of Contents

Foreword by the Minister of Finance

The federal government paid down $17.1 billion of its debt in 2000-01, its largest debt paydown ever. In the last four years the federal government has reduced its debt by $35.8 billion. Net public debt now stands at $547.4 billion. This represents 51.8 per cent of gross domestic product (GDP), compared to almost 71 per cent in 1995-96.

Reducing the debt by this amount is saving the Government $2.5 billion each year in interest payments. Reducing Canada's debt burden makes our country less vulnerable to economic shocks, such as higher interest rates or slowdowns in economic activity. This added measure of financial security is particularly crucial today given the current slowdown in the global economy. Canada is not immune to the effects of this slowdown.

Against this backdrop, it is important that Canadians be equipped with timely, comprehensive and transparent information about how the debt is managed so that they can hold the Government accountable for its decisions – decisions that affect the long-term financial security of the nation and the well-being of individuals.

The *Debt Management Report* fulfills this need by providing a detailed account of the federal government's debt operations, including the composition of the debt, its distribution, and the mechanisms and activities through which it is prudently managed in the interests of Canadians.

I want to take this opportunity to assure Canadians of the Government's unwavering commitment to prudence in the management of public finances. Sound financial management is a key part of our strategy to sustain an economic environment that can offer Canadians more jobs, higher incomes and a better quality of life.

The Honourable Paul Martin, P.C., M.P.
Minister of Finance
Ottawa, November 2001

Purpose of the Report

The *Debt Management Report* provides a detailed account of the federal government's borrowing and cash management operations in the past fiscal year (April 1, 2000 to March 31, 2001).

Debt-servicing costs are the largest spending program of the federal government, and the effective management of the programs that give rise to these costs is important to all Canadians. The Report provides a comprehensive account of the context within which the debt is managed, its composition and changes during the year, and strategic initiatives. The Report's major reference point is the *Debt Management Strategy*, published before the start of the fiscal year.

Timely and transparent information of this kind is of use to market participants and ensures public accountability. To this end, both reports are tabled annually in Parliament and are available on the Department of Finance Web site at www.fin.gc.ca.

Highlights of 2000-01

The net public debt has been reduced by some $36 billion since 1996-97.

- In 2000-01 the federal government continued to reduce its level of indebtedness. The Government's net public debt was reduced by $17.1 billion to $547.4 billion, and it is down $35.8 billion from its peak in 1996-97. Net public debt as a percentage of GDP dropped to 51.8 per cent in 2000-01 from a peak of 70.7 per cent in 1995-96. In 2000-01 alone the net debt-to-GDP ratio dropped by 6.1 percentage points, the largest drop since 1948-49. This is the fifth consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1985-86.
- The Government's principal debt strategy objectives for 2000-01 were to maintain a prudent financial position and to maintain and enhance the functioning of the Government of Canada securities market.
- The structure of Canada's debt stock was managed in keeping with a continuing target of having two-thirds of the Government's total interest-bearing debt in fixed-rate form. Maintenance of a two-thirds debt structure balances prudence and continuing access to lowest-cost sources of funds.

The Government undertook a number of initiatives to enhance the Government of Canada securities market.

- A number of initiatives were undertaken in 2000-01 to enhance the market for Government of Canada securities and improve the Government's treasury operations, including:
  - in April 2000 the pilot bond buyback program was implemented on an ongoing basis to assist in the maintenance of primary bond market liquidity;
  - in June 2000 a market proposal to remove the ceiling on the reconstitution of government bonds with common maturity dates was approved and implemented in February 2001, enhancing liquidity in the secondary market;
  - in July 2000 a new framework for the investment of the Government's cash balances aimed at broadening participation by investors and enhancing risk management was issued for comment; and
  - in January 2001 a pilot cash management bond buyback program was launched in order to smooth the Government's cash needs and usage of the Treasury bill program.

Foreign exchange reserves were increased and a risk management framework developed.

- With respect to the management of the Government's foreign debt and assets, the following actions of note were taken in 2000-01:
  - the level of international reserves was increased to US$33.5 billion at March 31, 2001, from US$31.1 billion at March 31, 2000, substantially meeting the Government's objective of bringing the level of reserves in line with that of comparable sovereigns;
  - in April 2000 the Government announced its intention to adopt collective action clauses in its future foreign currency bond and note issues, providing leadership to the international community with respect to the development of an orderly framework for debt restructuring by debtors and creditors; and
  - a comprehensive risk management framework for the foreign asset/liability portfolio was developed, including a collateral management system to manage the Government's credit risk with private sector counterparts.

2000-01 Debt Management Environment

Changes in the level of the Government's debt and its annual debt costs are affected by developments on two fronts: the Government's fiscal results and the path of interest rates over the year. This section provides a brief summary of these developments and their consequences.

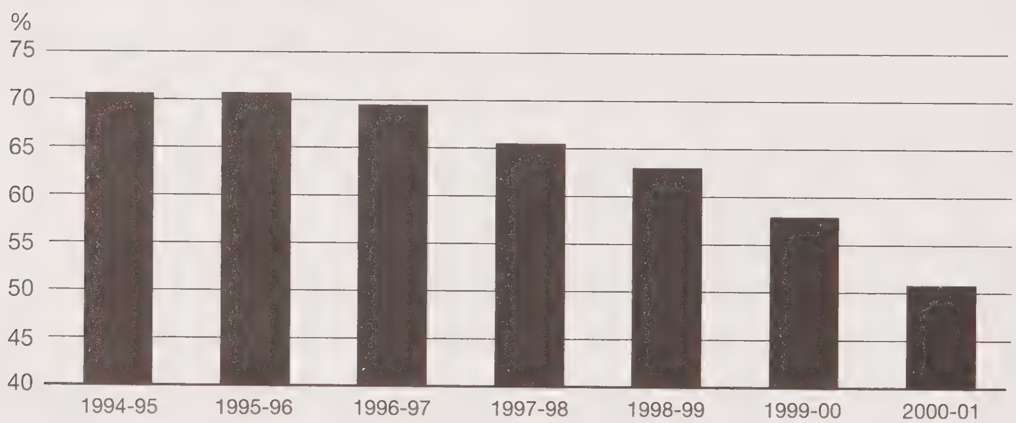
Fiscal Developments

Budgetary Results

The Government recorded a budgetary surplus of $17.1 billion.

In 2000-01 the Government recorded a budgetary surplus of $17.1 billion. This follows surpluses of $3.5 billion in 1997-98, $2.9 billion in 1998-99 and $12.3 billion in 1999-2000. Over the past four years the Government's net public debt has been reduced by $35.8 billion. It stood at 51.8 per cent of GDP in 2000-01, down from a peak of 70.7 per cent in 1995-96. This ratio is generally recognized as the most appropriate indicator of the debt burden as it measures debt relative to the ability of the Government and the country's taxpayers to finance it. In 2000-01 alone the net debt-to-GDP ratio declined by 6.1 percentage points, the largest drop since 1948-49. This is the fifth consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1985-86 (see Chart 1).

Chart 1
Net Debt-to-GDP Ratio



Source: Department of Finance.

Financial Requirements/Source

There was a financial source, including foreign exchange transactions, of $10.2 billion.

The budgetary surplus of $17.1 billion, combined with a net source of funds from non-budgetary transactions of $1.8 billion, produced a financial source (excluding foreign exchange transactions) of $19.0 billion, following a financial source of $14.6 billion in 1999-2000. The results for 2000-01 mark the fifth consecutive year that the Government has recorded a financial source (excluding foreign exchange transactions). Including foreign exchange transactions, primarily relating to supplementing foreign exchange reserves, the net financial source was $10.2 billion for 2000-01. Of this amount, $10.0 billion was used to reduce market debt and $0.2 billion was held in cash.

Canada is the only G-7 nation to record a financial source for five consecutive years.

Financial requirements/source (excluding foreign exchange transactions) is a measure of the Government's financial position that is broadly comparable to the measure of budgetary balance used by other major industrialized countries, including the United States. On this basis, Canada is the only Group of Seven (G-7) country to report a financial source for five consecutive years.

The Budgetary Surplus and Financial Source, 2000-01

	($ billions)
Budgetary surplus	17.1
Net source of funds from non-budgetary transactions	1.8
Financial source (excluding foreign exchange transactions)	19.0*
Net requirement of funds from foreign exchange transactions	(8.8)
Net financial source	10.2

The budgetary balance is presented on a modified accrual basis of accounting, recording government liabilities when they are incurred, regardless of when the cash payment is made, and recording tax revenues only when the cash is received.

In contrast, financial requirements/source measures the difference between cash coming in to the Government and cash going out. It differs from the budgetary balance in that it includes transactions in loans, investments and advances, federal employees' pension accounts, other specified purpose accounts and changes in other financial assets and liabilities. These activities are included as part of non-budgetary transactions.

*Numbers do not add due to rounding.

Composition of the Federal Debt

There are several measures of the debt.

Reports on the federal government's debt and debt management strategy use certain terms to describe the debt: gross public debt, market debt, non-market debt and net public debt.

Gross Public Debt

Gross and net public debt, as well as market debt, have all declined in recent years.

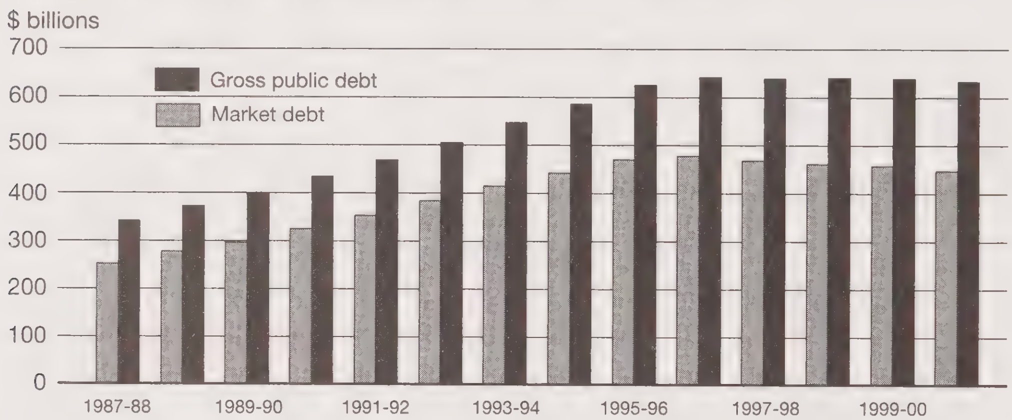
Gross public debt is made up of two major components: market debt and non-market debt. Gross public debt at the end of March 2001 totalled $632.9 billion, down from a peak of $640.7 billion in 1996-97 (see Chart 2).

Market Debt

Market debt is the portion of debt that is funded in the credit markets and actively managed by the Government. It consists of marketable bonds, Treasury bills, Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), foreign-currency-denominated marketable bonds, short-term paper bills, and non-marketable bonds held by the Canada Pension Plan (CPP). At March 31, 2001, market debt outstanding was $446.4 billion. In 2000-01 the level of market debt declined by $10.0 billion (see Chart 2).

Chart 2

Evolution or Gross Public Debt and Market Debt



Source: *Public Accounts of Canada.*

Non-Market Debt

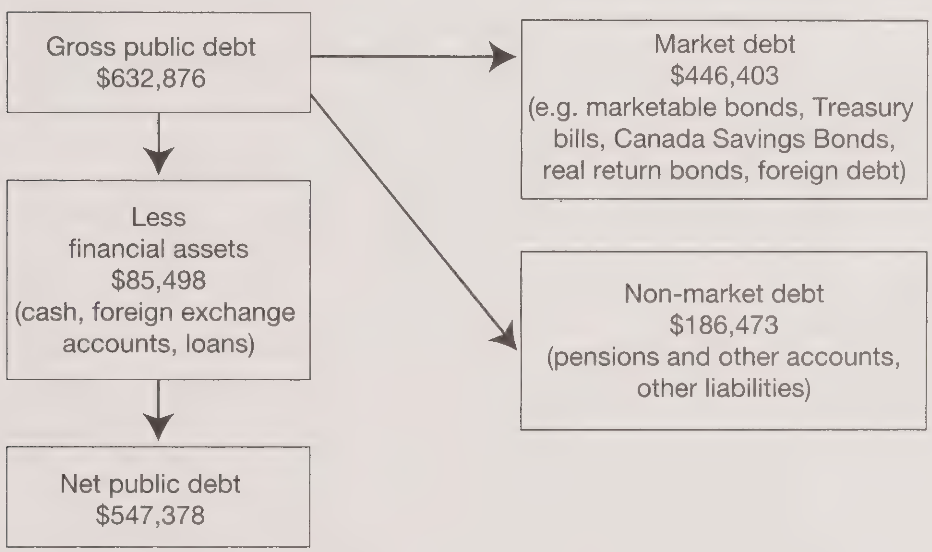
Non-market debt includes liabilities held by the Government outside the credit markets. This includes money owed to public sector pensions, the CPP and other accounts, and the Government's current liabilities and allowances. In 2000-01 non-market debt was $186.5 billion, up from $182.3 billion in 1999-2000.

Net Public Debt

Net public debt is gross public debt minus financial assets. Financial assets include cash, foreign exchange accounts and loans. Net public debt declined from $564.5 billion in 1999-2000 to $547.4 billion in 2000-01. The Government's financial assets increased by $11.3 billion to $85.5 billion in 2000-01, primarily due to a continued increase in the Government's foreign exchange reserves.

The net public debt-to-GDP ratio is generally recognized as the most appropriate indicator of the debt burden as it measures debt relative to the ability of the Government and the country's taxpayers to finance it. This ratio dropped to 51.8 per cent in 2000-01 from a peak of 70.7 per cent in 1995-96.

Figure 1 – Total Public Debt as at March 31, 2001
($ millions)



Source: *Public Accounts of Canada.*

Market Developments

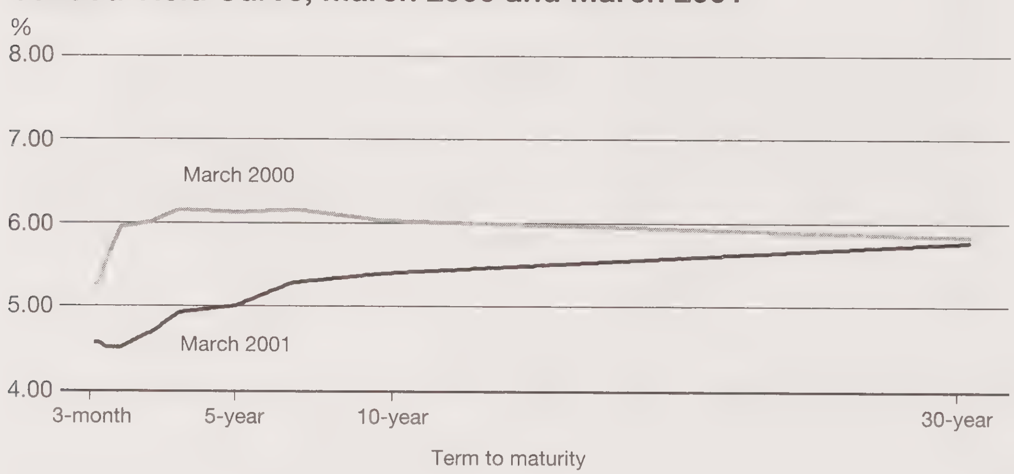
Interest rates declined in 2000-01, reflecting the easing of monetary conditions.

The domestic financial market environment was stable for the first three quarters of the 2000-01 fiscal year, and then became more volatile towards fiscal year-end. The fourth quarter of the fiscal year was marked by declines in equity prices, a global economic slowdown and US dollar strength. In Canada economic growth was healthy through 2000 and core inflation remained within the 1 to 3 per cent target range. Short-term interest rates rose modestly during the first half of 2000 as the Bank of Canada raised its target rate for overnight loans from 5.25 per cent to 5.75 per cent, then fell in 2001 as the Bank reduced the target rate from 5.75 per cent in January 2001 to 5.00 per cent in March 2001. These developments are consistent with those in the US.

The yield curve reverted to a positive normal slope over the year.

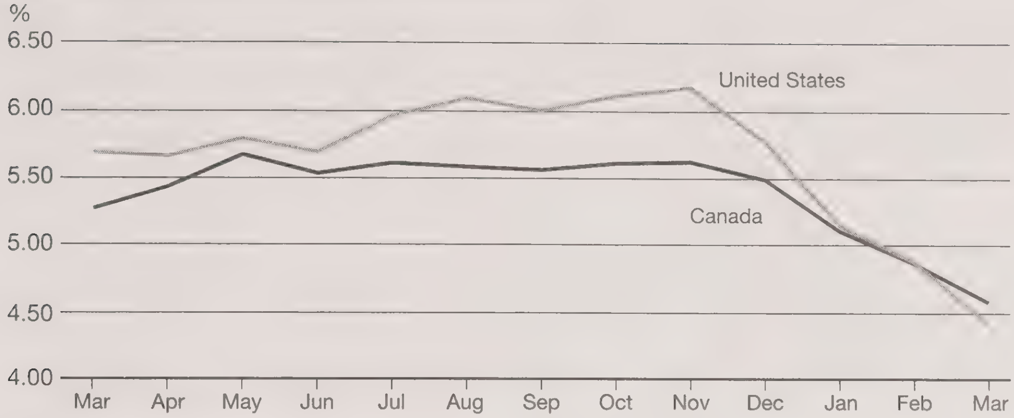
Government yield curves (i.e. the structure of interest rates from short-term to long-term rates) in Canada and the US began the year in the unusual situation of being inverted or downward sloping (for Canada see Chart 3). This reflected a number of factors, including expectations regarding the direction of monetary policy, concerns about reductions in the supply of government securities in an environment of budgetary surpluses, especially at longer terms to maturity, and a high degree of confidence in long-term inflation performance. By the end of the year government yield curves had returned to a normal upward sloping curve, much of which is attributable to a sharp drop in yields at the short to medium ends of the curve. Relative to US rates, Canadian interest rates were lower until November, when US rates moved below Canadian rates across all maturities (see Charts 4, 5 and 6).

Chart 3
Canada Yield Curve, March 2000 and March 2001



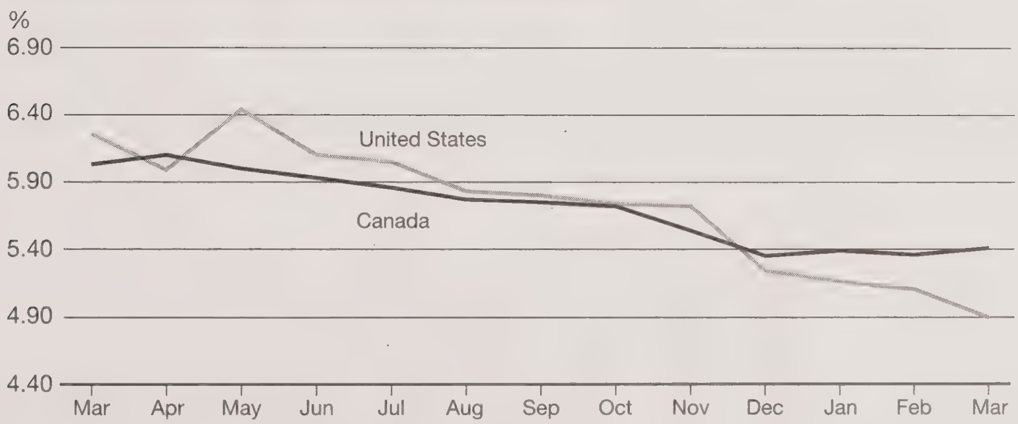
Source: Bank of Canada.

Chart 4
3-Month Treasury Bill Rates, 2000-01



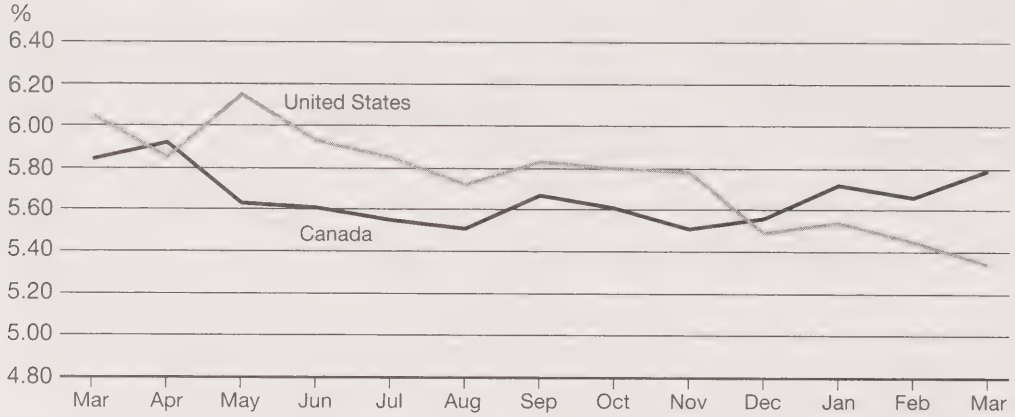
Sources: Bank of Canada and Federal Reserve Board.

Chart 5
10-Year Government Bond Rates, 2000-01



Sources: Bank of Canada and Federal Reserve Board.

Chart 6
Long-Term Government Bond Rates, 2000-01



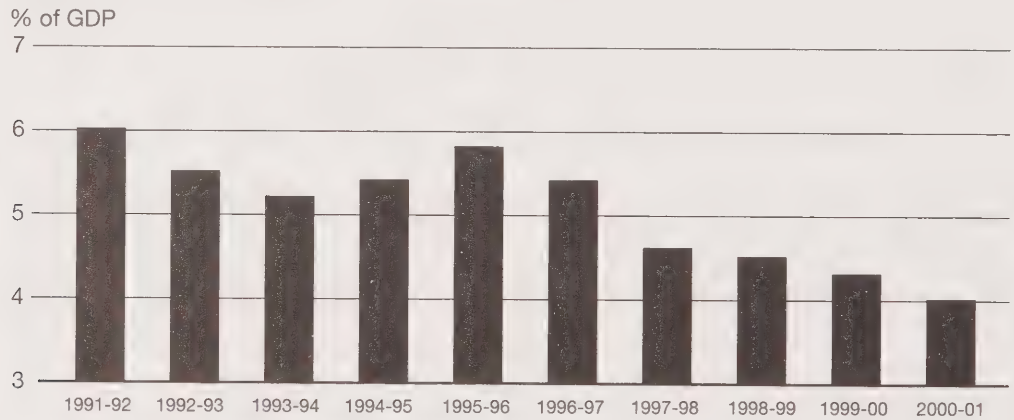
Sources: Bank of Canada and Federal Reserve Board.

Public Debt Costs

Public debt charges have continued to fall relative to GDP.

The Government spent about 24 cents of every dollar of revenue in 2000-01 to pay the interest on the public debt, down from its peak of 36 cents in 1995-96, and now at its lowest rate since 1981-82. Public debt charges as a percentage of GDP declined to 4.0 per cent in 2000-01 from 4.3 per cent in 1999-2000 (see Chart 7).

Chart 7
Public Debt Charges



Source: *Public Accounts of Canada.*

Report on 2000-01 Debt Programs

Market debt declined from $456.4 billion in 1999-2000 to $446.4 billion in 2000-01.

As of March 31, 2001, market debt outstanding comprised $279.9 billion in fixed-coupon marketable bonds, $15.1 billion in real return bonds (RRBs),[1] $88.7 billion in Treasury bills, $26.1 billion in CSBs and CPBs, $3.5 billion in CPP bonds and $33.2 billion in foreign-currency-denominated securities (see Table 1). In addition, the Government had $2.7 billion in interest rate swaps and $24.9 billion in cross-currency swaps outstanding as of March 31, 2001. Taking into account the effect of cross-currency swaps, foreign currency obligations were 12.3 per cent of market debt.

This section provides details on the operations of each major debt program. In 2000-01 the stock of Treasury bills decreased by $11.2 billion while the stock amounts of other instruments remained largely unchanged. For information on the federal debt management framework, see Annex 1. For descriptions of the individual programs, see Annex 2.

Table 1

Composition of Federal Market Debt, 2000-01

	March 31, 2000 outstanding	New issues	Maturing	Repurchase	March 31, 2001 outstanding	Change
			($ billions)			
C$-denominated						
Fixed-coupon marketable bonds	280.6	38.5	33.9	5.3****	279.9	-0.7
Real return bonds*	13.3	1.8	–	–	15.1	1.8
Treasury bills**	99.9	174.3	185.5		88.7	-11.2
Retail debt	26.5	3.2	3.7	–	26.1	-0.4
Total domestic debt	420.3				409.7	-10.6
Foreign-currency-denominated						
Canada Bills	6.0	31.2	30.2	–	7.2	1.2
Foreign bonds***	21.4	–	2.2	–	20.7	-0.7
Canada Notes	1.1	0.6	0.0	–	1.6	0.5
Euro Medium-Term Notes	4.1	–	0.6	–	3.7	-0.4
Total foreign debt	32.6				33.2	0.6
CPP bonds and notes	3.6	1.3	1.3	–	3.5	-0.1
Total market debt	456.4				446.4	-10.0

Note: As at March 31, 2001, the total amount of interest-rate and cross-currency swaps outstanding stood at C$27.6 billion (see Reference Table XI). Numbers may not add due to rounding.

* Includes CPI adjustment.

** These securities are issued at 3-, 6- and 12-month maturities and therefore are rolled over a number of times during the year for refinancing. This results in a larger number of new issues per year than stock outstanding at the end of the fiscal year.

*** Includes $492.0 million in securities assumed by the Government of Canada on February 5, 2001, on the dissolution of Petro Canada Limited.

**** Includes bond buyback program and the pilot cash management bond buyback program.

Source: *Public Accounts of Canada.*

[1] Includes consumer price index (CPI) adjustment.

Domestic Debt

Fixed-Coupon Marketable Bonds and Bond Buybacks

Gross issuance of bonds was $38.5 billion.

Fixed-coupon marketable bonds are issued at 2-, 5-, 10- and 30-year maturities on a regular basis. These bonds are non-callable and pay semi-annual coupon payments. Bond buybacks occur with every bond auction and allow the Government to buy back bonds in order to assist in the maintenance of primary bond market liquidity. In 2000-01 gross issuance of bonds of $38.5 billion consisted of $14.1 billion in 2-year bonds, $10.5 billion in 5-year bonds, $10.1 billion in 10-year bonds and $3.8 billion in 30-year bonds. $33.9 billion of bonds matured during the year. Bond buybacks and cash management bond buybacks totalled $5.3 billion. Net new issuance of fixed-coupon marketable bonds during the year, taking into account buybacks and maturities, declined by $0.7 billion (gross issuance less repurchases less maturing issues), bringing the stock of outstanding marketable bonds down to $279.9 billion as at March 31, 2001.

Real Return Bonds

$1.4 billion in RRBs were issued.

Government of Canada RRBs are issued at the long end of the maturity curve. Unlike standard fixed-coupon marketable bonds, interest payments on RRBs are adjusted for changes in the CPI, i.e. inflation. 2000-01 issuance of RRBs totalled $1.4 billion, increasing the level of outstanding RRBs from $12.1 to $13.5 billion (from $13.3 to $15.1 billion including the CPI adjustment) as at March 31, 2001 (see Reference Table X).

Treasury Bills

The Treasury bill stock fell by $11.2 billion.

Treasury bills are auctioned every two weeks in 3-, 6- and 12-month maturities and pay out at maturity at par (face) value. The stock of outstanding Treasury bills declined by $11.2 billion during the 2000-01 fiscal year to a level of $88.7 billion at March 31, 2001. In 2000-01 the Government issued $174.3 billion in new Treasury bills, down from $213.6 billion in 1999-2000 (see Reference Table VI).

Retail Debt

The retail debt stock fell by $400 million.

There are two types of retail debt: CSBs and CPBs. CSBs are available in regular interest and compound interest forms. They provide minimum guaranteed interest rates and may increase if market conditions warrant. CSBs can be registered only in the name of residents of Canada. CPBs offer a higher rate of interest at the time of issue compared to CSBs on sale at the same time. CPBs' announced interest rates for the posted periods do not change once the issue date has passed. In 2000-01 the level of outstanding debt held by domestic retail investors – CSBs and CPBs – decreased from $26.5 billion to $26.1 billion.

Foreign Debt

Canada Bills

Canada Bills outstanding rose by US$500 million.

Canada Bills are promissory notes denominated in US dollars and mature not more than 270 days from their issue. These securities are issued for foreign exchange reserve funding purposes only. In 2000-01 the level of outstanding Canada Bills increased from $6.0 billion (US$4.1 billion) to $7.2 billion (US$4.6 billion)

Canada Notes

Canada Notes outstanding rose US$300 million due to a US$400-million yen bond issue that was very well received.

Canada Notes are promissory notes denominated in foreign currencies for terms of nine months or longer at a fixed or floating rate. They are issued for foreign exchange reserve funding purposes only. The stock of outstanding Canada Notes rose from $1.1 billion to $1.6 billion during 2000-01. Public market borrowing by Canada during the year (apart from Canada Bills issuance) took the form of a single issue: a five-year 50-billion yen (equivalent to some $625 million or US$400 million) note launched in March. The issue was successfully placed with U.K., European and US institutional investors and received favourable public comments.

Euro Medium-Term Notes

EMTNs outstanding fell US$260 million.

The Euro Medium-Term Note (EMTN) program was introduced in March 1997 to diversify the sources of cost-effective funding for Canada's foreign exchange reserves. Notes issued under the new program can be denominated in a range of currencies and structured to meet investor demand. Obligations are usually swapped to US dollars, the primary currency held in the foreign exchange reserves. In 2000-01 there were no new EMTN transactions, and the total outstanding decreased from $4.1 billion (US$2.60 billion) to $3.7 billion (US$2.34 billion).

Foreign-Currency-Denominated Bonds

No global bonds were issued.

Apart from the yen bond issue under the Canada Notes program, there was no new global bond issuance in 2000-01. A total of $800 million of foreign currency bonds matured in 2000-01.

Cross-Currency Swaps

US$2.5 billion was raised by 37 cross-currency swaps.

At the beginning of a cross-currency swap, the Government of Canada receives a principal amount in US dollars or euros from the counterparty in exchange for a Canadian-dollar principal payment sourced from domestic bond issues. At the end of the swap contract the Government repays the US-dollar principal amount and receives the Canadian-dollar principal payment. In 2000-01 the federal government raised $3.9 billion (US$2.5 billion) by entering into 37 cross-currency swaps (see Reference Table XI).

Debt Management Strategy: 2000-01 Initiatives

Key strategic objectives are to maintain a prudent debt structure and a well-functioning market.

The fundamental debt management objective is to raise stable, low-cost funding for the Government. Key strategic objectives are to maintain a prudent debt structure and a well-functioning market for Government of Canada securities. (*Debt Management Strategy 2000-01* outlined the debt management plan for 2000-01 and is available on the Department of Finance Web site at www.fin.gc.ca.)

The following sections report on the Government's initiatives designed to address these strategic goals. The section entitled "Maintaining a Well-Functioning Market" details the initiatives taken to maintain a well-functioning market in Government of Canada securities. The section entitled "Maintaining a Prudent Debt Structure" reports on the key measures and analysis used in determining the target debt structure. "Maintaining a Diversified Investor Base" reports on developments in the investor base of Government of Canada bonds, including domestic and non-resident holdings. And the section entitled "Foreign Debt and Assets Management Strategy" reports on the management of foreign debt and assets.

Federal Debt Management Strategy Summary

Fundamental Objective

- Raise stable, low-cost funding for the Government.

Strategic Objectives

- Maintain a prudent debt structure.
- Maintain and enhance a well-functioning market for Government of Canada securities.
- Maintain a diversified investor base.

Operational Principles

- **Prudence:** The Government manages the composition of the debt to help protect its fiscal position from unexpected increases in interest rates and to limit refinancing needs. The Government raises all the required funding for its operational needs in the domestic market. Currency and interest rate risks arising in the management of the Government's foreign reserves portfolio are minimized to the extent possible by matching the currency and duration of assets and liabilities.
- **Transparency, liquidity and regularity:** The Government places emphasis on transparency, liquidity and regularity in the design and implementation of its debt programs in order to maintain a well-functioning domestic market.
- **Diversification:** The Government uses a range of financial sources and borrowing terms to maintain a diversified investor base.
- **Market integrity:** The Government works with market participants and regulators to maintain the integrity and attractiveness to investors of the Government of Canada securities market.
- **Consultations:** The Government actively seeks input from market participants on major adjustments to the federal debt and cash management programs.
- **Best practices:** The Government seeks to ensure that its operational framework and practices are in line with the best practices of other comparable sovereign borrowers and the private sector.

For more information on the general framework within which the federal debt is managed, see Annex 1.

Maintaining a Well-Functioning Market

The Government continues to place emphasis on the principles of transparency, liquidity and regularity.

A well-functioning Government of Canada securities market helps to ensure low-cost financing for the federal government over time by providing efficiency for investors, thereby attracting broad participation in the market. The Government's operating principles of transparency, liquidity and regularity are operationalized by borrowing and repurchasing securities in the domestic market on a regular, pre-announced basis in key segments of the market, building large bond benchmarks and maintaining transparent rules for participation at Government of Canada securities auctions.

Market participants are consulted regularly.

Federal government securities play a key role in Canada's fixed-income market by providing the benchmark against which other instruments are priced, hedged and traded. The Government monitors auction results, secondary market turnover and transaction costs in the Government of Canada securities market as indicators of liquidity and market efficiency. It also works closely with market participants to address issues of market function and integrity. Market participants are consulted regularly on the Government's debt strategy and adjustments to its domestic debt programs. Through this approach the Government seeks to maintain a high standard of transparency, improve the attractiveness of the market for investors, and take into account market views in decisions on debt management operations.

In recent years the Government has made a number of adjustments to its operations to enhance the liquidity of the market, such as moving to biweekly Treasury bill auctions, increasing benchmark bond target sizes and introducing a bond buyback program.

A number of initiatives were undertaken in 2000-01 to enhance the functioning of the Government of Canada securities market.

In 2000-01 the federal government undertook a number of initiatives to maintain and enhance a well-functioning market in its securities, including:

- increasing target benchmark bond sizes for 5-, 10- and 30-year bonds from $7 billion-$10 billion to $9 billion-$12 billion to enhance liquidity;
- approving new rules related to stripping and reconstitution of Government of Canada bonds to improve secondary market liquidity;
- implementing the pilot bond buyback program on an ongoing basis and expanding the range of eligible securities to support the maintenance of a liquid new bond issue market;
- implementing a pilot cash management bond buyback program to reduce the peak levels of government cash balances and improve the functioning of the Treasury bill program;
- reviewing the structure of the Treasury bill program to ensure it meets investor needs; and
- continuing discussions with market participants and regulators on the regulatory framework for electronic trading systems in the domestic fixed-income market.

These initiatives are discussed in more detail in the following sections.

Bond Program

Bond benchmark targets were increased for 5-, 10- and 30-year bonds.

In consultations held before the 2000-01 debt strategy was established, market participants were generally pleased with the design and functioning of the Government of Canada bond market, but indicated that benchmark targets could be increased to maintain Canada's position in an environment of ever-higher global standards. Accordingly, in its 2000-01 debt strategy the Government increased target benchmark sizes for 5-, 10- and 30-year bonds from $7 billion-$10 billion to $9 billion-12 billion.

Annual Government of Canada bond turnover decreased to 11.5 times the outstanding stock in 2000-01 from 11.7 times in 1999-2000. While the level of trading activity globally has diminished over the past two years, Canada's bond market remains one of the most active sovereign bond markets in the world based on indicators of the liquidity of the market. These include the volume of transactions and turnover ratios comparable to those of other G-7 countries, with the exception of the US (see Charts 8 to 12).

Government of Canada Securities Statistics

Comparison With Other Countries

The Government of Canada bond market compares favourably with other major sovereign bond markets. The market had an annual stock turnover level in 2000 of 11.0, behind only the United States, which had a stock turnover level of 19.4.

Chart 8
Sovereign Bond Turnover Ratios

Note: Turnover ratio is total trading volume in each quarter/stock.
* Data for Japan unavailable for 2000.
Source: Bank of Canada.

Market Activity

The volume of transactions in the Government of Canada bond market has grown significantly since 1990. Total marketable bond trading volume was $3,424 billion in 2000-01, a 1.8-per-cent decrease from 1999-2000. The annual turnover ratio was 11.5 in 2000-01 compared to 11.7 in 1999-2000 (see Chart 9). The volume of transactions in the Treasury bill market remained at the low levels seen in recent years, as the stock of Treasury bills outstanding has fallen. In 2000-01 total Treasury bill turnover was $1,039 billion. The annual turnover ratio was 13.0 in the second quarter of 2001 (see Chart 10).

Chart 9
Government of Canada Bonds Trading Volume and Turnover Ratio

Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 10
Government of Canada Treasury Bills Trading Volume and Turnover Ratio

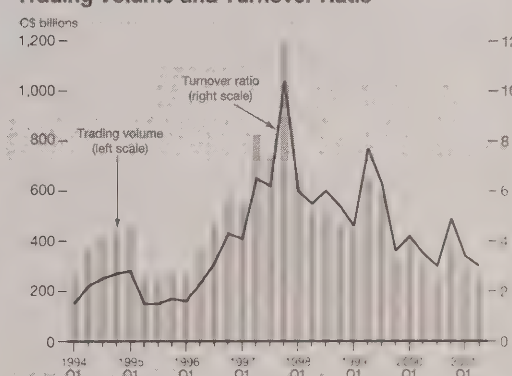
Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

An active repo market is a hallmark of a well-functioning government securities market. The total turnover for Government of Canada bond repos in 2000-01 decreased to $17,511 billion from $18,037 billion in 1999-2000. Furthermore, the annual turnover ratio for bond repos in 2000-01 was 58.6 (see Chart 11). The Treasury bill repo market volume in 2000-01 was $1,235 billion and the annual turnover ratio was 14.8 (see Chart 12).

Chart 11
Government of Canada Bond Repos Trading Volume and Turnover Ratio

Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 12
Government of Canada Treasury Bill Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Futures contracts are important complements to an efficient Government of Canada securities market. In Canada the trading volume of futures contracts maintained the levels of previous years. There is an active futures contract based on benchmark 5- and 10-year Government of Canada bonds (the CGF and CGB contracts). Open interest of the futures contract on 10-year Government of Canada bonds increased to 55,469 in 2000, an 88-per-cent increase from 1999. The CGB contract continues to be an actively traded contract, setting a new daily trading volume record on November 27, with 50,880 contracts traded, surpassing the two-year-old record of 41,649 set in 1998.

Bond Buyback Program

To enhance liquidity in the market of Government of Canada securities, a pilot bond buyback program was implemented in 1998-99. The program allows the Government to buy back less liquid bonds, thus supporting a liquid new bond issue market. More specifically, repurchases of outstanding bonds are funded by issuance of new benchmark bonds, increasing the size of the bond program beyond the level needed to meet the Government's financial requirements.

The bond buyback program was implemented on an ongoing basis and the range of maturities expanded.

An internal evaluation of the pilot, which included feedback from market participants, took place in late 1999. The evaluation indicated that the program has been successful in meeting its objectives. As a result, in its 2000-01 debt strategy the Government implemented the bond buyback program on an ongoing basis. The program was expanded to include bonds with maturities across a wider range of the yield curve in order to encourage the participation of a wider range of market participants. Specifically, the program was expanded from bonds with maturities up to 2011 to include bonds with maturities up to 2022.

The repurchase program has enabled the Government to conduct larger auctions in 1998-99, 1999-2000 and 2000-01 than would have been the case in the absence of a buyback program (see Table 2). An additional benefit of the program was improved secondary market liquidity, as trading increased in less liquid bonds targeted for repurchases under the program.

The size of the annual bond buyback program and the number of transactions depend on several factors, including the desired size of the new issuance and buyback program, market feedback and financial requirements. The size of the program was also affected by the quality of offers received. To protect the integrity of the program, the Government retains the right to repurchase less than the target amounts in cases where offers are not competitive.

Table 2
Bond Buyback Program

	1998-99	1999-2000	2000-01
		($ millions)	
Amount repurchased	1,000	3,263	2,832

Treasury Bill Program

The Treasury bill program structure was reviewed to ensure it continues to meet investor needs.

The Treasury bill stock was reduced sharply in the latter half of the 1990s as the Government increased the fixed-rate share of the debt stock. Liquidity and trading activity has fallen over the period. Annual Treasury bill turnover declined to 12.3 times the amount of the stock in 2000-01 from 13.2 in 1999-2000 (see Chart 10 for quarterly results). In the spring of 1999 and again in the fall of 2000, the Government asked market participants for views on a restructuring of the program to improve liquidity. The majority of market participants continued to indicate that they prefer to maintain the existing biweekly auctions of three tranches of Treasury bills; as a result, no changes were made.

Stripping and Reconstitution of Bonds

Stripping involves separating bonds into individual interest and principal payment components, while reconstitution involves collecting individual components to create synthetic whole bonds – the opposite of stripping. Market participants use these techniques to match the supply and demand for certain securities.

The Government approved the removal of the ceiling on the reconstitution of Government of Canada bonds to enhance secondary market liquidity.

In June 1999 the Investment Dealers Association of Canada (IDA) requested that the federal government approve the removal of the ceiling on the reconstitution of Government of Canada securities to improve secondary market liquidity. The ceiling limited the amount of a given bond, held in the Canadian Depository for Securities Limited (CDS), that could be reconstituted to the amount previously stripped.

In June 2000 the federal government announced its support for the IDA's request, viewing the initiative as an additional tool for enhancing liquidity in the Government of Canada securities market, particularly for benchmark securities, and as a complement to the regular bond buyback program. The new rule was implemented by the CDS in February 2001. Market participants stripped and reconstituted a total of \$4.5 billion and \$5.8 billion face value of securities respectively during the first week following the rule change, clearly indicating that the initiative has been helpful to the market.

Pilot Cash Management Bond Buyback Program

A pilot cash management bond buyback program was implemented.

To help in smoothing the Government's cash requirements and to aid the functioning of the Treasury bill program, a pilot program of cash management bond buybacks was implemented in January 2001. The purpose of the program is to reduce the peak levels of government cash balances needed to redeem upcoming large bond maturities. This involves buying back large bonds with less than 12 months before they mature. The program also helps to smooth out seasonal fluctuations in Treasury bill issuance by reducing cash requirement peaks.

The first cash management buyback of \$500 million was held on January 16, 2001. Following this, \$1 billion worth of bonds were repurchased in February and March, for a total of \$2.5 billion for fiscal year 2000-01.

Market Transparency and Electronic Trading

The Government supports improving market transparency to provide assurance that transaction pricing is fair and to enhance the attractiveness of the fixed-income market for a wide array of investors. In particular, this has involved the development of a screen-based, real-time information system (CanPx) that was established by dealers and inter-dealer brokers in 1999. CanPx provides market participants with best bid and offer prices and trading volumes in a range of benchmark fixed-income securities, and gives Canada a transparency standard that is in line with the practices of comparable sovereign countries.

The Department of Finance and the Bank of Canada actively contributed to discussions on the development of a regulatory framework for alternative trading systems.

Electronic commerce in wholesale fixed-income markets is growing rapidly internationally. The Government has a strong interest in the development of wholesale market e-commerce initiatives that would promote the maintenance of a liquid and efficient domestic fixed-income market. In 2000-01 the Department of Finance and the Bank of Canada actively contributed to discussions with Canadian securities regulators and market participants on the design of a regulatory framework for alternative trading systems that encourages their development and contributes to enhanced market transparency and efficiency.

Retail Debt

Canadians were able to purchase both CSBs and CPBs during a six-month period between October 2, 2000, and April 1, 2001. The CSB featured one-year pricing and cashability of the principal at any time, with no interest payable if cashed within three months of its purchase date. The CPB featured longer-term pricing higher than the CSB, but with cashability reduced to once a year. Both bonds have registered retirement savings plan and registered retirement income fund options. CPBs made up the larger share of total sales, contributing to the diversification of the Government's investor base.

The Retail Debt Program continues to provide Canadians access to safe and secure savings instruments.

The Retail Debt Program continues to provide Canadians access to safe and secure savings instruments. To increase access and improve the distribution of retail products for the Government, several initiatives were undertaken. The direct option of purchasing CSBs and CPBs by telephone was enhanced and provided the Department of Finance with valuable information. In the payroll channel, an on-line application form was successfully piloted. As well, a Web site transmission option was introduced that allows small and medium-sized businesses to submit employee payroll deduction data directly to the Bank of Canada. For further information on retail debt plans and operations, see the Canada Investment and Savings Web site at www.csb.gc.ca.

Maintaining a Prudent Debt Structure

The Government maintains a debt structure that balances prudence with continuing access to lowest-cost sources of funds.

While the debt stock is on a downward trend, it remains large. Managing a large stock of debt exposes the Government to financial risk arising from changes in interest rates. The Government's strategic objective is to maintain a debt structure that balances prudence with continuing access to lowest-cost sources of funds.

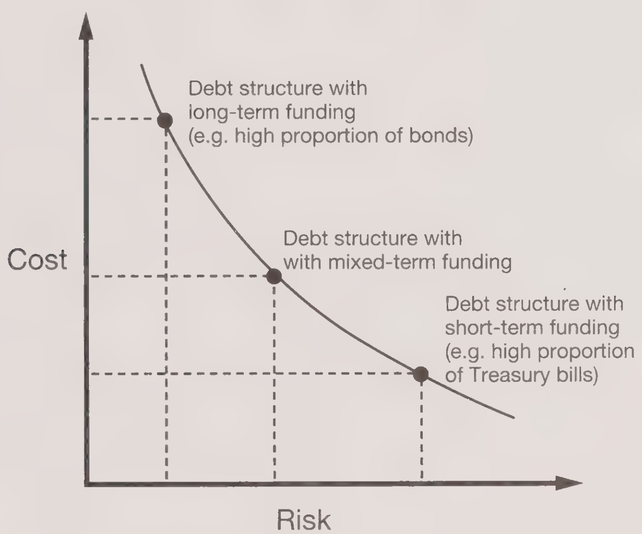
This section describes the Government's approach to maintaining a prudent debt structure and reports on analytical work done in 2000-01. The capacity of the Government debt managers to assess risk is continually being upgraded in line with the best practices of other sovereigns. In keeping with comments made by the Auditor General of Canada in his April 2000 report on the Government's debt management programs, "Managing Canada's Debt: Facing New Challenges," this section of the report has been expanded to enhance understanding of the measures used by the Government and to present current analytical results.

The Cost/Risk Trade-Off

There is a trade-off between keeping costs low and ensuring they are stable over time.

In establishing its debt structure, the Government trades off keeping borrowing costs low against ensuring that any additional debt-servicing costs resulting from unexpected increases in interest rates do not exceed its tolerance for risk. This trade-off reflects the fact that longer-term debt instruments are generally more costly and less risky than shorter-term debt instruments. To be more specific, long-term maturity instruments such as Government of Canada bonds typically have higher debt-servicing costs (i.e. pay higher coupon rates) than short-term instruments such as Treasury bills. On the other hand, the fixed-coupon rates of outstanding bonds are known with certainty, and therefore result in lower interest rate risk compared to Treasury bills, which mature each year and need to be refinanced at the then-prevailing market interest rates (see Chart 13).

Chart 13
Costs/Risk Trade-Off Depends on the Type and Amount of Government-Issued Securities That Compose the Debt Structure



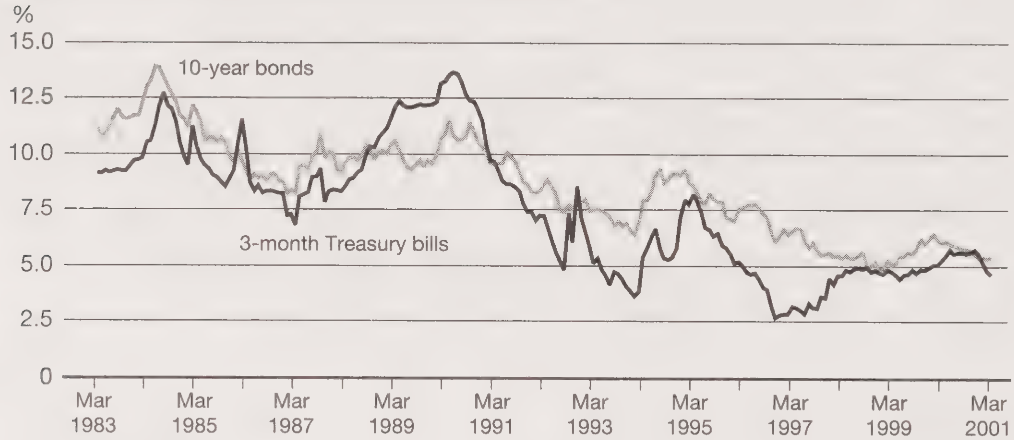
Note: See Annex 2 for more information on Government of Canada market debt instruments that make up the debt.

The Government takes a long-term strategic view in choosing a target debt structure.

The Government takes a long-term strategic view in choosing a target debt structure in order to have reasonable, and lasting, cost stability under a range of potential interest rate environments. Although the fiscal situation has improved considerably in recent years, the stock of outstanding debt that is exposed to interest rate changes remains very large. Roughly one-quarter of the federal government's budgetary expenditures are debt-servicing charges, and sharp movements in interest rates have the potential to disrupt budgetary planning. An example of such a movement occurred in the late 1980s (see Chart 14).

Between March 1987 and March 1990, interest rates on Treasury bills nearly doubled while interest rates on 10-year government bonds increased only by about one-third. Debt costs were significantly affected as the debt structure at that time had a high proportion of short-term debt.

Chart 14
Short-Term and Long-Term Interest Rates



Source: Department of Finance.

Assessing the Cost/Risk Trade-Off – Measures and Targets

The Government uses a number of tools to assess the cost/risk trade-off.

Debt managers gauge and describe the sensitivity of the debt structure to unexpected changes in interest rates by using various measures. Measures such as the fixed-rate share of the debt, average term to maturity and duration characterize the composition of the debt and indicate how much of or how often the debt structure is exposed to interest rate variations. Other measures, such as a simulation methodology called Cost at Risk, quantify directly the risk of incurring additional debt costs given a particular debt structure. These measures, consistent with the best practices of comparable sovereign borrowers, are used by the Government to evaluate the performance of past debt management and guide future debt management.

Targets for the main operational measure – fixed-rate share – have been established for many years and reported in previous Debt Management Reports. Average term to maturity and maturity profile are two other measures that have been used in previous years to complement the fixed-rate share analysis. Recently the range and sophistication of analysis of the cost/risk trade-off has been enhanced with the introduction of Cost at Risk. Work is currently ongoing on the addition of a duration measure to the toolkit.

The sections below describe each of the measures/targets used by the Government in managing the debt. Table 3 provides a quick reference to the four measures.

Table 3
Current Cost/Risk Measures

Measure	What it measures	How it is used
Fixed-rate share	The portion of the debt held at fixed interest rates (those over 12 months)	As a general measure of the interest rate sensitivity and a target for the composition of the debt
Maturity profile	The year-to-year distribution of maturing debt	As a measure of refinancing exposure over time
Average term to maturity	The average time remaining before debt matures taking into account principal repayments only	As an indicator of how quickly changes in interest rates will affect debt costs
Cost at Risk	The debt cost impact resulting from interest rate exposure	As a measure of debt cost variability associated with a given debt structure

Fixed-Rate Share

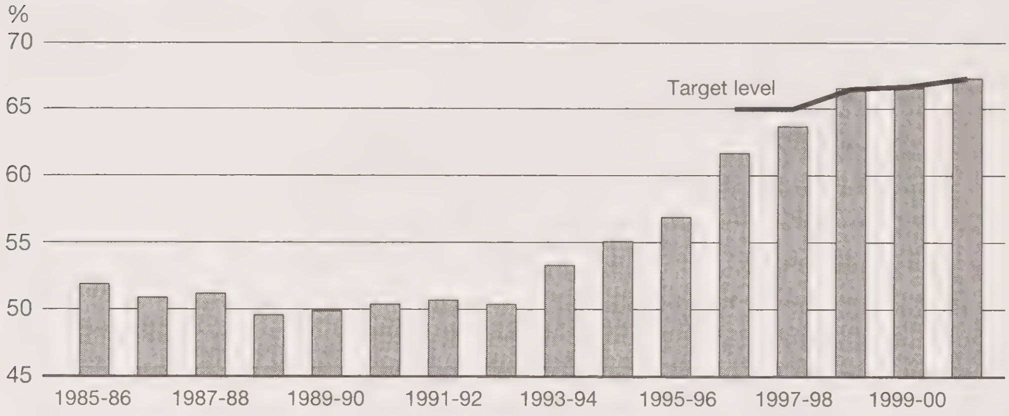
The key operational measure and target that the Government uses is known as the fixed-rate share. The fixed-rate share is computed as the proportion of interest-bearing debt having fixed rates – debt that does not mature or need to be re-priced within a year – relative to the entire interest-bearing debt stock.

Generally speaking, debt-servicing costs increase (decrease) and financial risk decreases (increase) with a higher (lower) fixed-rate share. The fixed-rate share is a popular indicator among central governments because it is an intuitive measure that is fairly easy to compute and understand.

The Government currently targets a debt structure that is two-thirds fixed and one-third floating.

Following the sharp increase in interest rates in the late 1980s, the Government took measures to reduce the exposure of the debt stock to volatility in interest rates. The share of the debt stock at fixed rates increased from one-half in 1989-90 to an operational target of two-thirds in 1998-99. Since that time the debt has been managed to maintain a quarterly average fixed ratio within a range of ±1 per cent of the two-thirds target. The change in the composition of the debt structure was generally accomplished by reducing the stock of Treasury bills. For the past two fiscal years the debt has been managed around a target fixed-rate portion of two-thirds of the debt (see Chart 15).

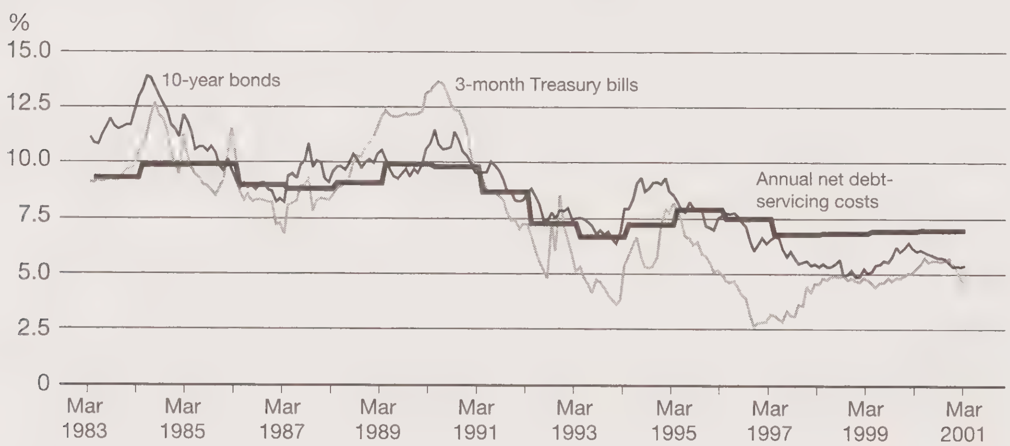
Chart 15
Fixed-Rate Share of Interest-Bearing Debt at March 31



Source: Department of Finance.

As noted before, there can be a trade-off between risk reduction and debt-servicing costs. In the 1980s and early 1990s, when the debt had a high floating-rate component, debt-servicing costs tracked movements in interest rates (see Chart 16). Annual debt-servicing costs as a proportion of total debt generally floated between short- and long-term interest rates but varied significantly from year to year.

Chart 16
Interest Rates and Debt-Servicing Costs



Source: Department of Finance.

The two-thirds fixed structure is prudent in view of potential interest rate volatility.

By establishing a more prudent two-thirds fixed-rate debt structure, the Government has reduced the sensitivity of its annual debt-servicing costs, and hence underlying balance, to changes in interest rates. This is illustrated in Chart 16 by the relatively stable debt-servicing cost line over the past five years.[2] Currently debt-servicing costs exceed the present level of interest rates because a substantial portion of fixed-rate debt was borrowed in times of higher interest rates. In due course, however, it can be expected that overall debt-servicing costs will decline as debt that matures is refinanced at lower interest rates.

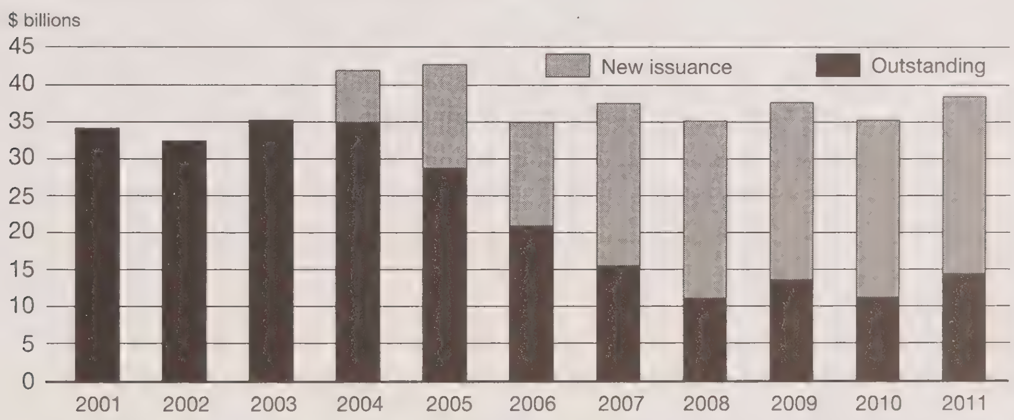
Maturity Profile

The maturity profile is managed to limit refinancing risk over time.

The Government manages the maturity profile of the debt (i.e. the amount that matures, or comes due, in any given year) to limit its refinancing risk. A well-distributed maturity profile reduces the risk that a relatively large proportion of the debt will mature and need to be refinanced in a period of higher interest rates.

The maturity profile of domestic government bonds is shown in Chart 17. The profile consists of a portion related to borrowing in previous years and a portion attributed to future refinanced borrowing. Initiatives to regularize bond refinancing into predictable benchmark securities have led to a gradual smoothing out of the maturity profile of the bond stock. In particular, there have been moves to build large benchmark bond issues for four maturities of domestic bonds (2-, 5-, 10- and 30-year) and issue bonds at regular quarterly intervals.

Chart 17
Maturity Profile of Domestic Bonds



Note: Excludes Treasury bills. Projections assume future issuance remains at 2000-01 levels and excludes buybacks.
Source: Department of Finance.

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[2] Net debt-servicing cost is the following ratio: (Gross Public Debt Charges less Return on Investments)/(Total Interest-Bearing Debt less Financial Assets).

Treasury bills, unlike bonds, mature within a year of their issuance and are therefore excluded from the maturity profile depicted in Chart 17. The decline in Treasury bill issuance in the late 1990s has also contributed to lowering the Government's refinancing risk. For example, in 1995 the Government was required to refinance, on average, $8 billion per week in maturing Treasury bills, compared to an average of $3.6 billion per week in 2000.

Since the maturity profile characterizes the distribution of maturing debt, it cannot be summarized with a simple numerical measure. Because of this drawback, maturity profile analysis is combined with measures such as average term to maturity or duration.

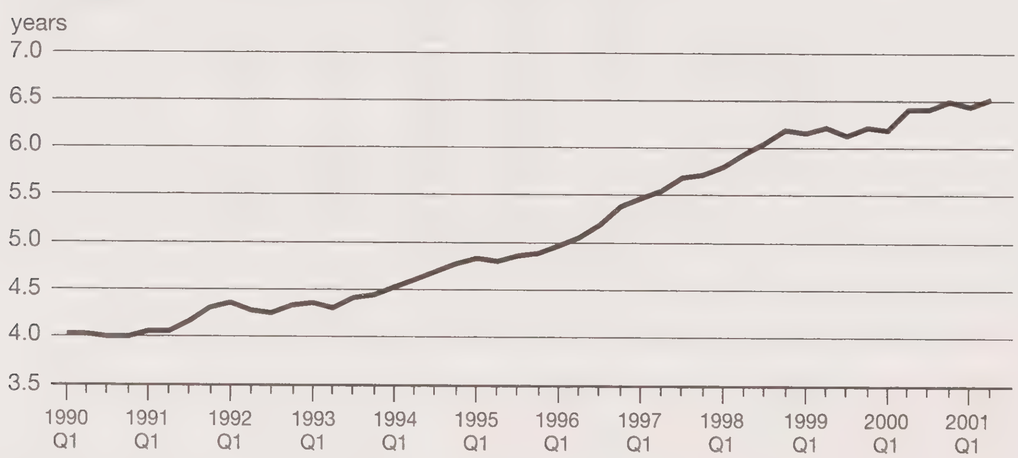
Average Term to Maturity

ATM is used as an indicator of how quickly changes in interest rates will affect debt costs.

The average term to maturity (ATM) is the average lifespan of the financial instruments that make up the debt. Measured in years, ATM represents the average length of time before debt instruments mature and are subject to refinancing risk. Longer ATMs mean that debt instruments are rolled over less frequently, which implies less uncertainty regarding future debt costs. Debt structures with a high proportion of long-term debt have higher ATMs. Since long-term debt is usually issued at fixed rates, ATM is a complementary measure to the fixed-rate share indicator.

The ATM of marketable debt has increased from roughly 4 years in 1990 to 6.4 years in March 2001 (see Chart 18). The upward trend in ATM resulted from the increase in the fixed-rate share and a reduction in the stock of Treasury bills. These changes have brought the term structure of Canada's debt more in line with the debt structures of the other G-7 countries. The ATM should now gradually stabilize as the higher fixed-rate structure target has been achieved.

Chart 18
Average Term to Maturity of Marketable Debt



Source: Bank of Canada.

Duration is another way of measuring the length of time before refinancing risk occurs. Similar to ATM, higher duration values reflect lower refinancing risk. Compared to ATM, duration is a more sophisticated and accurate way of measuring refinancing risk because, in addition to capturing the risk of refinancing principal amounts at maturity, it looks at the refinancing risk associated with coupon or interest payments that occur through the life of debt instruments. Because duration considers financial flows through the life of the debt instrument, the duration will be shorter than the ATM of the same structure. At the end of March 2001 the Government's debt had a duration of 4.4 years, excluding swaps.

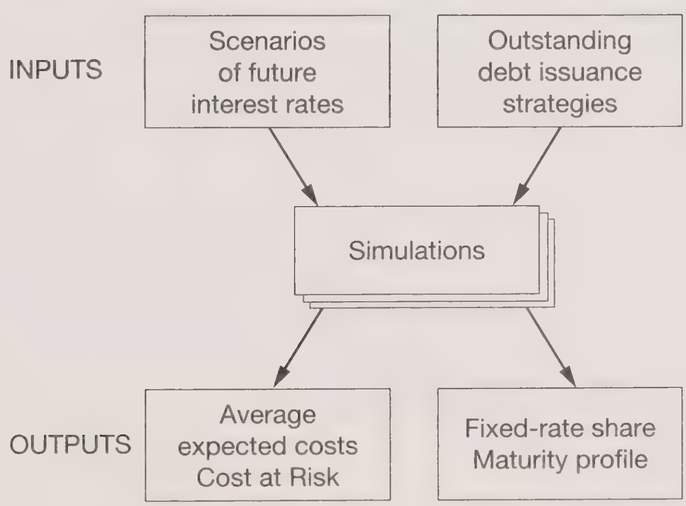
Cost at Risk

The Government has recently enhanced its long-term cost/risk sensitivity analysis by introducing a more comprehensive measure known as Cost at Risk (CaR). CaR contributes to the Government's debt management decisions by quantifying the risk directly in terms of potential debt cost. This measure is similar to the well-known Value at Risk measure used extensively throughout the financial community.

Cost at Risk measures the debt cost variability associated with different debt structures.

CaR is a sophisticated and rigorous way of identifying whether the risk of higher debt-servicing costs, measured in dollars, falls within the Government's tolerance level for risk. CaR analysis involves simulating future debt costs using approximately 1,000 possible interest rate scenarios. The analysis is performed with various debt structures in order to better determine the relationship between debt structure, debt costs and risk. The purpose of the simulations is to identify the dollar amount of additional debt costs that would occur with a certain probability.

Figure 2 – Cost at Risk Analytical Framework

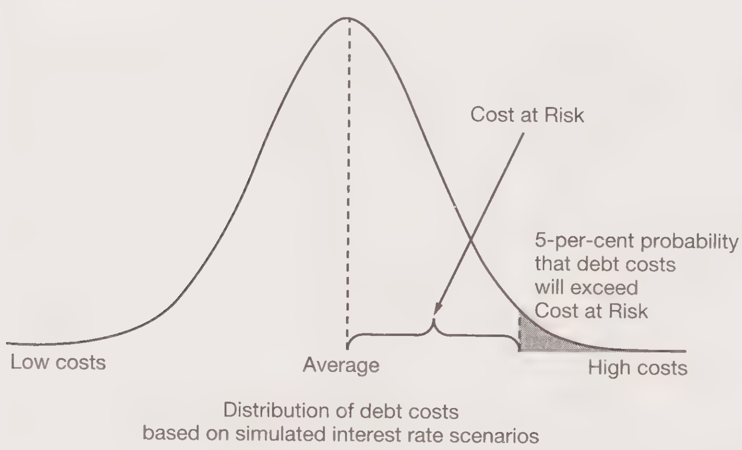


The CaR analysis framework is depicted in Figure 2. First, a large number of interest rate scenarios are generated, based on a theoretical model from the economic literature, to represent the full range of plausible developments in the interest rate term structure. The outstanding stock of debt is considered and several issuance strategies are developed. The simulation is then performed for all interest rate scenarios to generate a statistical distribution of possible debt costs and the cash flows for each issuance strategy. The average debt cost and CaR statistic are extracted from the obtained distribution along with projected cash flows. The cash flows are then used to forecast the fixed-rate share and maturity profile indicators.

The statistical distribution for the debt costs has the general shape of the distribution in Figure 3. As a rule of thumb, scenarios with a large positive (negative) shock to interest rates lead to high (low) future debt costs. However, the central tendency is for most shocks to be small in nature. The debt structure is seen as prudent when there is only a 5-per-cent probability that an increase in interest rates causes debt costs to exceed the defined tolerance level. In other words, when evaluating different debt structures (or issuance strategies), a key factor is whether or not CaR falls within a risk tolerance range that is acceptable to the Government.

It should be noted that unlike other measures such as fixed-rate share, ATM and duration, CaR is not an objective measure because it depends on several assumptions. In particular, experience has shown that results are very sensitive to the interest rate scenarios employed. The Government is continuing to develop the CaR analysis.

Figure 3 – Measuring the Risk of Future Debt Charges



2000-01 Cost/Risk Analysis Results

Analysis was done in 2000-01 on the cost/risk trade-off using the current two-thirds fixed-rate structure and two alternative debt structures – one with a 5-per-cent higher and one with a 5-per-cent lower fixed-rate debt share. Assuming no changes to interest rates, the 62-per-cent fixed-rate debt structure is the less costly among the three debt structures. However, in the event that interest rates increase by 100 or 300 basis points (i.e. 1 per cent or 3 per cent), the 62-per-cent debt structure becomes more costly than the two other higher fixed-rate debt structures. (Note that the comparisons of alternative debt structures are only indicative because it is impossible to specify what debt issuance decisions would have been taken had the Government been operating with alternative fixed-rate share targets.)[3]

Cost at Risk analysis indicates that the current two-thirds fixed-rate debt structure helps to control interest rate exposure.

The analysis indicates that increasing the fixed-rate share of the debt to two-thirds has significantly reduced interest rate exposure. For example, the first-year impact on net debt-servicing costs[4] of a 100-basis-point shock in interest rates in 2000-01 would be $900 million under the current structure, compared to $1.8 billion at the time of the 1995 budget. Such a shock would add approximately 15 basis points to the effective interest rate on the debt in the first year. That is, net debt-servicing costs to net debt would increase by 0.15 per cent. It is estimated that net debt-servicing costs under a 100-basis-point shock would increase by $1.1 billion[5] under a lower fixed-rate share of 62 per cent – some $200 million higher than under the current two-thirds fixed-rate share.

With a more severe 300-basis-point shock, the degree of protection afforded by a higher debt structure is proportionally larger. For example, the impact on net debt-servicing costs would be about $500 million higher with a 62-per-cent fixed-rate share than with a 67-per-cent fixed-rate share.

The analysis also indicates that the reduction of interest rate exposure from raising the fixed-rate share of the debt has a cost. Fixed-rate debt issued since 1996-97 generally paid higher interest rates than Treasury bills in 2000-01, so costs might have been lower by about $100 million in 2000-01 (2 basis points) had the Government not increased the fixed-rate share beyond the 62-per-cent level achieved in 1996-97. It is important to note that this cost differential may vary substantially from year to year based on the term structure of interest rates.

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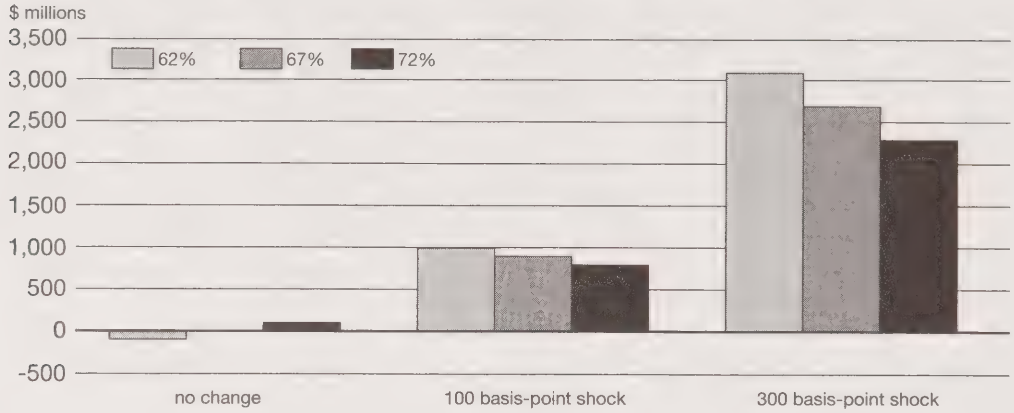
[3] Certain assumptions need to be made regarding the composition of alternative portfolios. The general approach is to notionally transfer debt between marketable bonds and Treasury bills, implicitly assuming that any decision to operate with more or less fixed-rate debt would have been reflected by the stock of these two debt instruments.

[4] That is, the increase in debt-servicing costs net of the increased earnings on interest-bearing assets. The total impact on the budgetary balance would be about $1.1 billion higher when considering the decline in value of the foreign reserves that would occur. However, this loss is not realized unless the assets are sold prior to their maturity.

[5] Under no changes in interest rates, a 62-per-cent fixed-rate share has a lower net debt-servicing cost of $100 million than the two-thirds structure. Under a 100-basis-point-shock a 62-per-cent fixed-rate share regime would increase by $1.1 billion above the two-thirds fixed-rate share at the no-change level. The total increase in net debt-servicing costs under a 62-per-cent fixed-rate structure would therefore be $1.1 billion.

Chart 19
Sensitivity Analysis: First-Year Impact on Net Debt Charges



Note: Values represent estimated deviation from actual debt costs.

Source: Department of Finance.

Sensitivity analysis shows that there is a low probability that interest rate shocks would disrupt the fiscal framework.

The difference in costs depicted in Chart 19, for example, reflects a relatively flat term structure (i.e. a smaller difference between short-term and long-term interest rates) compared to historical averages, which would tend to reduce the cost difference between shorter- and longer-term securities.

Results of the most recent CaR analysis, based on upgraded assumptions and methodologies, indicate that with the two-thirds fixed-rate structure in place on March 31, 2001, there is a high probability that the impact of most interest rate shocks would not disrupt the fiscal framework.

Maintaining a Diversified Investor Base

Diversified Investor Base

A diversified investor base is maintained to ensure active demand for Government of Canada securities, thereby reducing funding costs.

A diversified investor base helps to reduce funding costs by ensuring that there is active demand for Government of Canada securities. The federal government pursues diversification of its investor base by maintaining a liquid and transparent domestic wholesale debt program that is attractive to a wide range of investors, and in foreign borrowings through the use of a broad array of sources of funds. In addition, Canada Investment and Savings, the Government's retail debt agency, contributes to a diversified investor base by offering savings products designed to suit the needs of individual Canadians.

Domestic Holdings of Government of Canada Debt

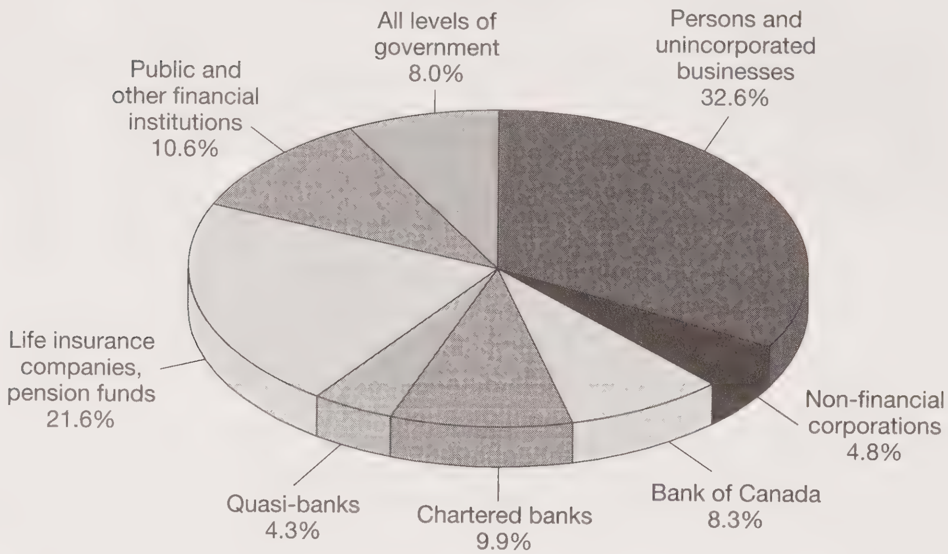
In 2000 (the latest year for which figures are available) life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (31.2 per cent), followed by public and other financial institutions such as investment dealers and mutual funds (see Chart 20). Taken together, they accounted for 52.6 per cent of domestic holdings.

There was a significant shift in the distribution of holdings of Government of Canada market debt in the 1990s. Life insurance companies' and pension funds' share grew from 21.6 per cent in 1990 to 31.2 per cent in 2000. Bonds and bills held by public and other financial institutions also increased sharply over the 1990-2000 period – from 10.6 per cent in 1990 to 21.4 per cent in 2000. Much of the increase is attributable to a significant increase in holdings by mutual funds. Chartered banks' share of holdings of market debt increased from 9.5 per cent in 1990 to 17.6 per cent in 2000, while the share of persons and unincorporated businesses decreased by more than 23 percentage points to 9.4 per cent of domestic holdings. The latter change can largely be attributed to the shift towards more interest in equity investments by Canadians, particularly in recent years.

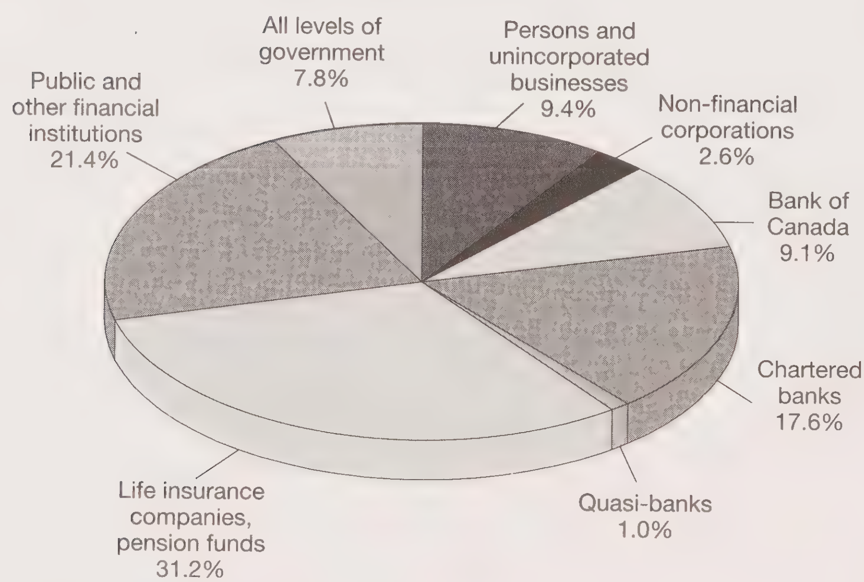
However, in the past year there have been no major changes in the distribution of holdings of government debt. Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

Chart 20
Distribution of Domestic Holdings of Government of Canada Market Debt as of December 31

1990 – $245.5 billion



2000 – $348.6 billion



Note: Numbers do not add due to rounding.
Source: Statistics Canada, *The National Balance Sheet Accounts*.

Foreign Debt and Assets Management Strategy

Foreign debt is used exclusively to raise foreign exchange reserves.

The Government of Canada borrows in foreign currencies exclusively to raise foreign exchange reserves for the Exchange Fund Account. The reserves in the Exchange Fund Account are maintained as a source of liquidity and can be used to promote orderly conditions in the foreign exchange market for the Canadian dollar. Further details on the management of international reserves is available in *Exchange Fund Account - Annual Report*, available on the Department of Finance Web site at www.fin.gc.ca.

The key objectives of Canada's reserve program are to:

- ensure that an appropriate level of reserves is maintained while minimizing the cost of carrying reserves;
- immunize to the extent possible currency and interest rate risks by selecting reserve assets that match the liabilities in currency and duration; and
- maintain diversified funding sources and a prudent liability structure to help manage refinancing needs.

Level of Reserves

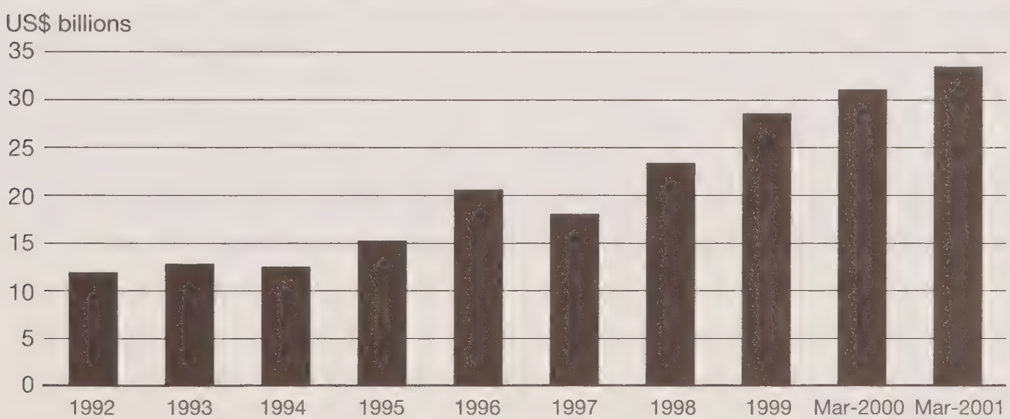
The level of foreign exchange reserves has been increased in recent years.

In recent years the Government has made a steady effort to increase Canada's international reserves with the objective of bringing the level more in line with that of comparable sovereigns. Reserves have been increased from US$11.9 billion at December 31, 1992, to US$33.5 billion at March 31, 2001 (see Chart 21). With the increases, the Government has made substantial progress in meeting its objective.

In 2000-01 international reserves increased by US$2.4 billion while foreign currency debt increased by US$0.4 billion.[6] Foreign exchange reserves increased as a result of cross-currency swaps of domestic obligations and purchases of US dollars in the spot foreign exchange market.

Chart 21

Canada's International Reserves, December 1992 to March 31, 2001



Sources: Department of Finance; International Monetary Fund, *International Financial Statistics*.

[6] Including $492 million in securities assumed by the Government of Canada on February 5, 2001, on the dissolution of Petro Canada Limited.

The Gap Between Foreign Currency Assets and Liabilities

The gap between foreign assets and liabilities is being reduced over time.

Foreign currency liabilities came to exceed liquid foreign currency assets (i.e. cash, deposits and securities) in the Exchange Fund Account in recent years, largely as a result of extensive foreign exchange intervention and important commitments to the International Monetary Fund in 1998. Consistent with the Government's policy of immunizing currency and interest rate risk in Canada's reserve program, the Government is taking steps to bring foreign currency liabilities in line with foreign currency assets.

In December 1998 the Department of Finance, in collaboration with the Bank of Canada, implemented a program of purchases of US dollars in the foreign exchange markets. The proceeds of sales of Canadian dollars are used to reduce US-dollar-denominated liabilities. This program is conducted by the Bank in its role as fiscal agent for the Government in its management of the federal debt.

Purchases of US dollars are small in relation to the large daily flows in foreign exchange markets and are undertaken with sensitivity to market conditions. The objective is to close the gap between foreign currency assets and liabilities over the next few years. When the program was implemented, the gap was some US$13 billion, and substantial progress has been made in closing it: as of March 31, 2001, the gap between foreign currency liabilities (US$36.6 billion) and liquid foreign currency assets (US$30.2 billion) stood at some US$6.3 billion.

Collective Action Clauses

In April 2000 Canada announced that it was adopting collective action clauses in its future foreign currency bond and note issues. Collective action clauses in bond contracts facilitate debt restructuring by providing an orderly framework for debtors and creditors.

Canada has led the world in introducing collective action clauses to promote international financial stability.

By bringing in collective action clauses, Canada indicated that it was helping to lead the process of having collective action clauses adopted by all countries. These clauses are part of Canada's effort to promote international financial stability and reduce the risk and severity of global financial crises. In recent years there has been a growing consensus that the wider use of collective action clauses in international bond contracts could contribute to a more orderly resolution of financial crises.

The documentation governing Canada's two foreign currency note programs (the Euro Medium-Term Note and Canada Note programs) has been modified to ensure that all future issuance under these programs includes collective action clauses. Future global bond issues by Canada will also include these clauses.

Risk Management Framework

The Government has in place a comprehensive risk management framework for identifying and managing treasury risk, including market, credit, operational and legal risks related to the financing and investment of the foreign exchange reserves. The Government's risk management policies call for prudent management of treasury risks based on best practices. Standards for risk tolerance are very prudent, with market risks generally immunized and high credit quality and diversification standards followed.

The Government is developing a collateral management framework to better manage the Government's credit risk.

In June 2000 the Minister of Finance approved a new framework and limits governing credit exposure to commercial financial institution (FI) counterparties with respect to the Government's foreign currency reserve portfolio. The framework is consistent with best practices in credit risk management and includes a rigorous, comprehensive credit risk system and credit exposure limits on counterparties across all lines of business.

In this context, the Government is proceeding with the development of a collateral management framework to better manage the Government's credit risk to FI counterparties associated with cross-currency swaps and forward contracts. Collateral management systems are increasingly the norm in capital markets as a way of managing credit risk associated with swaps. The effect of collateralization is to limit the exposure to the FI counterparty to the transaction by holding collateral when there is a material risk of loss.

Management of the Government's Cash Balances

The main cash management objective is to ensure that the Government has sufficient cash available to meet its operating and liquidity requirements.

The main objectives of the federal government's cash management operations are to ensure that the Government has sufficient cash available to meet its operating and liquidity requirements, and to invest cash in a prudent, cost-effective manner. Currently the federal government invests its cash balances with a limited number of deposit-taking institutions (participants in the Large-Value Transfer System) through a twice-daily auction process.

Management of the Government's cash balances requires forecasting and monitoring of its daily receipt and disbursement flows, as well as an ongoing borrowing program to refinance maturing debt and maintain the balances at targeted levels. There are inherent and large uncertainties in forecasting daily changes in cash balances owing to the scope of the Government's financial operations, periodic large maturities of Government of Canada bonds, the operations of the Bank of Canada and changes in market conditions. An adequate level of cash balances must be maintained at all times to meet these operational requirements and provide an appropriate liquidity cushion for the Government's financial operations.

The level of the Government's daily cash balances averaged $10.2 billion in fiscal 2000-01, up from $8.4 billion in fiscal 1999-2000. Earnings on term deposits averaged 5.61 per cent versus 4.78 per cent the previous year. Compared to the weighted cost of Treasury bill borrowings, the Government earned a positive spread by 4 basis points in 2000-01.

Proposed New Cash Management Investment Framework

A new cash management framework is being implemented.

In 1999-2000 the Department of Finance and the Bank of Canada undertook a review of the investment framework for the Government's domestic cash balances, as part of ongoing efforts to ensure that the Government's financing and investing operations are efficient and cost-effective and meet the standards of best practices appropriate for a sovereign government. The review led to the release of a discussion paper in July 2000 on changes to the auction framework and subsequent consultations with market participants.

The proposed changes to the framework are designed to increase competition in the auction of cash balances and to strengthen the management of risks, in particular the credit risks involved in the investment of cash balances. In summary, it was proposed that access to the auctions be opened to all significant participants in the domestic money market to ensure competitive returns are earned on cash balances and to diversify the Government's counterparties. The Government also proposed to introduce a credit risk management system through the use of credit ratings, credit lines and collateral agreements. At the end of 2000-01 work was continuing on the refinement of these proposals.

Annex 1

Federal Debt Management Framework

Legal Authorities

The Financial Administration Act (FAA) provides the statutory framework under which the Minister of Finance borrows money for the Government in financial markets. The FAA states that the Minister cannot borrow money without the authority of Parliament. Parliament authorizes the Minister to borrow new funds through borrowing authority acts. The Minister is authorized by the FAA to refinance maturing debt without further parliamentary authority. The Act provides the Minister with the authority to use modern financial and risk management tools and techniques such as interest rate and currency swaps, options, futures and forwards in the conduct of the Government's financial operations and for risk management purposes. In addition, the Act provides the Minister of Finance with legislative authority to establish rules governing the sale of the Government's debt.

In addition to the FAA, the Bank of Canada Act provides statutory authority for the Bank of Canada to act as the Government's fiscal agent. The Currency Act establishes the Exchange Fund Account and provides statutory authority for the Minister of Finance to manage the Account.

Institutional Responsibilities

The Department of Finance, including Canada Investment and Savings (CI&S), the Government's retail debt agency, manages federal market debt in conjunction with the Bank of Canada. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, for the investment of the Government's cash and reserve assets, and for the management of financial risks.

The Division works with the Bank of Canada, the Government's fiscal agent, on all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management, for example, conducting the auctions of government debt, issuing debt instruments, making interest payments and conducting foreign currency borrowing operations. The Bank also has responsibility for monitoring market activities and advising on debt management policy issues, as well as operating the Government's Risk Management Unit.

CI&S is a special operating agency of the Department of Finance, and its primary responsibility is the day-to-day management of the Retail Debt Program. CI&S, working in consultation with the Bank of Canada and the Financial Markets Division, is responsible for developing the Retail Debt Program's strategic direction and managing the front office aspects of the program.

Domestic Debt Operations

Domestic borrowings are done strategically, i.e. securities are issued on a regular, transparent basis to maximize investor interest and participation. Marketable bonds, real return bonds (RRBs) and Treasury bills are sold via auction, with the Bank of Canada operating as the Government's fiscal agent, to Government of Canada securities distributors and end-investors. Tenders are submitted to the Bank of Canada via the electronic auction system CARS (Communications, Auctions and Reporting System).

Bonds are auctioned on a quarterly basis in the 2-, 5- and 10-year maturities, and on a semi-annual basis in the 30-year maturity. Bonds may be either new maturities or reopenings of previously auctioned bonds. New issues are generally reopened several times in order to increase the size of the issue to the target benchmark bond size.

The bond auction calendar, setting out details of the planned quarterly issuance of marketable bonds, is published by the Bank of Canada prior to the start of each quarter. Final details, including the amounts to be auctioned, the maturity date, and the amount outstanding in the case of bond reopenings, are released one week prior to the auction.

Bond sales take place via multiple-price auctions, with the exception of RRBs, which are sold via single-price auctions. Government securities distributors and investors may submit competitive tenders or non-competitive tenders. For multiple-price auctions, competitive bids are accepted in rising order of yield (declining order of price) until the full amount of the issue being auctioned is allotted, while non-competitive bids are allotted at the average of the accepted competitive bids. For single-price auctions of RRBs, bonds are allotted at the price equivalent of the highest real yield of accepted competitive tenders, plus accrued interest and inflation adjustment.

Regular buyback operations in the 2-, 5-, 10- and 30-year maturities are held shortly after periodic corresponding bond auctions. The Bank of Canada publishes with the bond auction calendar the target amount of bonds the Government intends to buy back during the quarter. Final details of individual operations, including the target amount to be bought back and the basket of eligible bonds, are released one week prior to the auction with the release of bond auction under announcement.

Cash management buyback operations target large bonds with less than 12 months before they mature. They are held on an irregular basis to suit government cash management needs. These operations are held on Tuesday mornings before Treasury bill auctions. Details of individual operations, including the target amount to be bought back and the basket of bond targets, are announced one week in advance with a release of the Treasury bill tender announcement.

Regular buyback and cash management buyback operations are settled on a cash basis and take place via multiple-price reverse auctions. Competitive offers are accepted in decreasing order of yield (increasing order of price) until the target amount to buy back is met. The target amounts may not be purchased if the offers do not meet the Government's fair value criteria.

Treasury bills are sold via auction on a discount basis. Those with terms to maturity of approximately 3, 6 and 12 months are currently auctioned on a biweekly basis, generally on a Tuesday for delivery Thursday. Under the biweekly issuance pattern, new 3-month Treasury bills are issued at each biweekly auction; new 6- and 12-month Treasury bills are offered in the same week and then reopened once at the next regular auction two weeks later.

The terms for auctions for Government of Canada securities, the terms of participation at auctions, and the quarterly bond auction schedule and auction results are available on the Bank of Canada's Web site at www.bankofcanada.ca.

Domestic Distribution System

The participation of distributors and end-investors at Government of Canada debt auctions is governed by a set of auction rules and terms of participation introduced in October 1998.

There are 23 government securities distributors that participate in the primary distribution of bonds and Treasury bills. All must be either members or affiliate members of the Investment Dealers Association of Canada (IDA) and have their core trading and sales operation for Government of Canada securities in Canada.

Under the auction rules and terms for participants, there are specific bidding limits that apply to government securities distributors and end-investors at Treasury bill and bond auctions. The limits vary by distributor based on the firms' relative market activity in the primary and secondary market for the securities. Separate bidding limits apply for Treasury bill and bond auctions. All government securities distributors also have ongoing reporting responsibilities to provide the Bank of Canada with market information involving Government of Canada securities. In addition, all bidders at auction of Government of Canada securities, including customers, must abide by IDA Policy No. 5 governing standards for trading of debt securities in Canada.

Government securities distributors that maintain a certain threshold of activity in the primary and secondary market for Government of Canada securities become primary dealers, and form part of the core group of distributors of Government of Canada securities. The primary dealer classification can be attained in either Treasury bills or marketable bonds, or both. Primary dealers assume a number of responsibilities with respect to Government of Canada securities – they must comply with minimum bidding requirements for every auction so as to provide coverage at auctions as a group, and consistently make two-sided markets to a broad customer base.

Foreign Debt Operations

Foreign currency debt is made up of a short-term US-dollar commercial paper program (Canada Bills), two medium-term note programs (Canada Notes and Euro Medium-Term Notes) and large public bond issues. These securities are issued on an opportunistic basis when required and when market conditions are favourable. The Government also obtains foreign-denominated funding through purchases of US dollars in the spot foreign exchange market and through cross-currency swaps of domestic obligations.

Retail Debt Operations

The Government sells Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), referred to as non-marketable savings instruments, to individuals, or "retail" investors who are Canadian residents.

Two principal channels are used for sales of CSBs and CPBs: the Payroll Savings Program and financial institutions. The Payroll Savings Program allows employees of employers sponsoring the program to purchase CSBs during the sales campaign through payroll deductions.

During the six-month sales period (October-March) Canadians can also purchase CSBs and CPBs wherever they bank or invest, including banks and trust companies, investment dealers, savings and loan companies and credit unions. Additionally, Canadians, on a pilot basis, can purchase CSBs and CPBs directly from the Government by telephone.

Annex 2

Government of Canada Market Debt Instruments

Fixed-Coupon Marketable Bonds

Effective October 1995 Government of Canada marketable bonds are issued in global certificate form only whereby a global certificate for the full amount of the bonds is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). The bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to December 1993 Government of Canada bonds were issued in coupon-bearer and fully registered form, and were available in denominations ranging from $1,000 to $1,000,000. Between December 1993 and September 1995 Government of Canada bonds were issued only in fully registered form. All Canadian-dollar marketable bonds are non-callable and pay a fixed rate of interest semi-annually.

Treasury Bills

Effective November 1995 all new issues of Treasury bills are issued is global certificate form only whereby a global certificate for the full amount of the Treasury bill is issued in fully registered form in the name of CDS & Co., a nominee of the CDS. Treasury bills must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to November 1995 Treasury bills were issued in bearer form and were available in denominations ranging from $1,000 to $1,000,000.

The Government of Canada also periodically issues cash management bills (CMBs). CMBs are Treasury bills with maturities of less than three months (they can be as short as one day) used as a source of short-term financing for the Government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Government of Canada Real Return Bonds

Government of Canada real return bonds (RRBs) pay semi-annual interest based upon a real interest rate. Unlike standard fixed-coupon marketable bonds, interest payments on RRBs are adjusted for changes in the consumer price index (CPI). The CPI, for the purposes of RRBs, is the all-items CPI for Canada, not seasonally adjusted, published monthly by Statistics Canada. The semi-annual nominal coupon payments are calculated as follows:

$\text{coupon payment}_i = \text{real coupon rate}/2 \times (\text{principal} + \text{inflation compensation}_i)$
where $\text{inflation compensation}_i = ((\text{principal} \times \text{reference CPI}_i/\text{reference CPI}_{base}) - \text{principal})$.

Reference CPI for the first day of any calendar month is the CPI for the third preceding calendar month. The reference CPI for any other day in a month is calculated by linear interpolation between the reference CPI applicable to the first day of the month in which such day falls and the reference CPI applicable to the first day of the month immediately following. The reference CPI_{base} for a series of bonds is the reference CPI_i applicable to the original issue date for the series.

At maturity bondholders will receive, in addition to a coupon interest payment, a final payment equal to the sum of the principal amount and the inflation compensation accrued from the original issue date, i.e. final payment = principal + ((principal x reference $CPI_{maturity}$/reference CPI_{base}) – principal).

These bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service and only in integral multiples of $1,000 (face value).

Canada Savings Bonds

Canada Savings Bonds (CSBs) are offered for sale by most financial institutions in Canada. In addition, a significant number of organizations sponsor the Payroll Savings Program, thus allowing many Canadians to purchase CSBs through payroll deductions.

Except in certain specific circumstances, CSBs can be registered only in the name of residents of Canada. They are available in both regular interest and compound interest forms. For those CSBs which are certificated, denominations range from $100 ($300 for a regular interest bond) to $10,000. All CSBs are non-callable and, except in certain limited circumstances, non-transferable.

CSBs provide minimum guaranteed annual interest rates. The minimum guaranteed annual interest rate will be increased if market conditions warrant, but the bondholder will not earn less than the rate announced for that series for the posted period. CSBs are cashable at any time and, after the first three months, pay interest up to the end of the month prior to encashment. Principal and interest are fully backed by the Government of Canada.

Canada Premium Bonds

The Canada Premium Bond (CPB) was introduced by the Government of Canada in 1998. Like CSBs, CPBs are offered for sale at most financial institutions in Canada.

CPBs offer a higher rate of interest at the time of issue compared to the CSB on sale at the same time, and are redeemable once a year on the anniversary date of the issue and during the 30 days thereafter without penalty. Once an issue date has passed, the announced interest rates for the posted period will not be changed. CPBs are available in both regular interest and compound interest forms. The compound interest bond is available for as little as $100 while the regular interest bond is available starting from $300. Principal and interest are fully backed by the Government of Canada and this bond is non-callable.

Canada Bills

Canada Bills are promissory notes denominated in US dollars and issued only in book-entry form. They mature not more than 270 days from their date of issue, and are discount obligations with a minimum order size of US$1,000,000 and a minimum denomination of US$1,000. Delivery and payment for Canada Bills occur in same-day funds through Chase Manhattan Bank in New York City.

Primary distribution of Canada Bills occurs through five dealers: CIBC Wood Gundy Inc., Credit Suisse First Boston Corporation, Goldman, Sachs & Co., Lehman Brothers Inc. and RBC Dominion Securities Inc. Rates on Canada Bills are posted daily for terms of one to six months.

Canada Bills are issued for foreign exchange reserve funding purposes only.

Canada Notes

Canada Notes are promissory notes usually denominated in US dollars and available in book-entry form. They are issued in denominations of US$1,000 and integral multiples thereof. At present the aggregate principal amount outstanding issued under the program is limited to US$10.0 billion. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate.

The interest rate or interest rate formula, issue price, stated maturity, redemption or repayment provisions, and any other terms are established by the Government of Canada at the time of issuance of the notes and will be indicated in the Pricing Supplement. Delivery and payment for Canada Notes occur through the Bank of New York.

The notes are offered on a continual basis by the Government through five dealers: Credit Suisse First Boston Corporation, Goldman, Sachs & Co., Lehman Brothers Inc., Nesbitt Burns Securities Inc. and Scotia Capital Markets (USA) Inc. The Government may also sell notes to other dealers or directly to investors.

Canada Notes are issued for foreign exchange reserve funding purposes only.

Euro Medium-Term Notes

Euro Medium-Term Notes (EMTNs) are medium-term notes issued outside the United States and Canada. Government of Canada EMTNs are sold either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as the Government's agent for the particular transaction (called reverse inquiry). EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs is responsible for the sale of the notes) and on an intermittent basis.

The Arranger for the EMTN program is Morgan Stanley Dean Witter. The London-based dealer group includes CIBC World Markets plc, Goldman Sachs International, J.P. Morgan Securities Ltd., Nomura International, TD Securities, Deutsche Bank, Merrill Lynch International, Morgan Stanley Dean Witter, RBC Dominion Securities and Warburg Dillon Read.

The EMTN program further diversifies the sources of cost-effective funding for the foreign exchange reserves. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand.

EMTNs are issued for foreign exchange reserve funding purposes only.

Cross-Currency Swaps

A cross-currency swap is an agreement that exchanges one type of return for another (e.g. a fixed for a floating rate of interest) and the principal amount for the term of the swap. Cross-currency swaps of domestic obligations are a cost-effective alternative to foreign-currency-denominated bond issues as a means of meeting the Government's targets for longer-term foreign currency funding.

Annex 3

Glossary

benchmark bond: Specific issue outstanding within each class of maturities. It is considered by the market to be the standard against which all other bonds issued in that class are evaluated.

bid: Price a buyer is willing to pay.

bid-offer spread: The difference between bid and offer prices. It is typically measured in basis points (hundredths of a per cent).

budgetary surplus: Occurs when government annual revenues exceed annual budgetary expenditures. A deficit is the shortfall between government revenues and budgetary spending.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar in the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

financial requirements/source: Measures the difference between the cash coming in to the Government and the cash going out. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet the Government's financing needs in any given year.

foreign exchange reserves: Stocks of foreign exchange assets (e.g. interest-earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

gross public debt: Total amount the Government owes. It consists of both market debt in the form of outstanding securities, such as Treasury bills and Canada Savings Bonds, and internal debt owed mainly to the superannuation fund for government employees and other current liabilities.

interest-bearing debt: Consists of unmatured debt, or market debt, and the Government's liabilities to internally held accounts such as federal employees' pension plans.

market debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets, and consists of marketable bonds, Treasury bills, retail debt (e.g. Canada Savings Bonds), foreign-currency-denominated bonds and bills, as well as bonds issued to the Canada Pension Plan.

marketable debt: Market debt that is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

net public debt: Consists of gross public debt net of financial assets.

non-market debt: Consists of the Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt).

non-marketable debt: Market debt that is not tradable and that is issued to retail investors (Canada Savings Bonds and Canada Premium Bonds).

offer: Price at which a seller is willing to sell.

term structure of interest rates: The levels of interest rates from short- to long-term maturities.

turnover ratio: Volume of securities traded as a percentage of securities outstanding.

Reference Tables

Reference Table I

Gross Public Debt, Outstanding Market Debt and Debt Charges

Fiscal years ending March 31	Gross public debt: Outstanding	Gross public debt: Fixed-rate portion[1]	Gross public debt: Average fixed-rate portion[2]	Gross public debt: Total debt charges	Outstanding market debt: Outstanding	Outstanding market debt: Fixed-rate portion	Outstanding market debt: Total debt charges	Outstanding market debt: Average interest rate
	($ billions)	(%)	(%)	($ billions)	($ billions)	(%)	($ billions)	(%)
1985-86	274.8	51.9	0	25.4	201.2	36.7	20.7	10.66
1986-87	308.9	50.9	0	26.7	228.6	36.9	21.5	9.34
1987-88	340.1	51.2	0	29.0	250.8	38.2	23.1	9.61
1988-89	371.5	49.6	0	33.2	276.3	37.2	26.5	10.82
1989-90	397.2	49.9	0	38.8	294.6	38.1	31.4	11.20
1990-91	433.3	50.4	0	42.6	323.9	38.5	34.3	10.72
1991-92	467.4	50.7	0	41.2	351.9	38.9	32.4	8.86
1992-93	503.9	50.4	0	38.8	382.7	39.0	29.4	7.88
1993-94	546.4	53.3	0	38.0	414.0	42.7	28.0	6.75
1994-95	584.8	55.1	0	42.0	441.0	44.4	31.4	7.97
1995-96	624.7	56.9	0	46.9	469.5	47.9	35.3	7.34
1996-97	640.7	61.7	0	45.0	476.9	53.8	33.0	6.66
1997-98	638.5	63.7	0	40.9	467.3	56.8	31.0	6.64
1998-99	640.3	64.5	66.6	41.4	460.4	58.5	30.8	6.70
1999-00	638.7	66.5	66.6	41.6	456.4	59.1	30.5	6.15
2000-01	632.9	67.8	67.6	42.1	446.4	60.5	30.7	6.11

Note: Variances in the maturity structure of the debt will cause the fixed ratio to vary modestly on a monthly basis.

[1] As of March 31 and after adjusting for non-interest-bearing liabilities. Definition of fixed debt may vary slightly from year to year to accommodate changes in the debt structure.

[2] Average over the year. Comparative figures for prior years are not available.

Sources: *Public Accounts of Canada, Bank of Canada Review*, Department of Finance estimates.

Reference Table II

Government of Canada Outstanding Market Debt

Fiscal years ending March 31	Payable in Canadian dollars					Payable in foreign currencies						Total market debt
	Treasury bills	Marketable bonds	Retail debt	CPP bonds	Total	Marketable bonds	Canada Bills	Canada Notes[1]	Standby drawings	Term loans	Total	
	(C$ millions)											
1977-78	11,295	21,645	18,036	84	51,060	181	0	0	850	0	1,031	51,664
1978-79	13,535	26,988	19,443	96	60,062	3,319	0	0	2,782	1,115	7,216	66,640
1979-80	16,325	33,387	18,182	113	68,007	3,312	0	0	359	1,030	4,701	72,021
1980-81	21,770	40,976	15,966	136	78,848	3,236	0	0	355	1,046	4,637	83,138
1981-82	19,375	43,605	25,108	154	88,242	3,867	0	0	0	550	4,417	93,167
1982-83	29,125	48,473	32,753	171	110,522	4,872	0	0	0	362	5,234	116,562
1983-84	41,700	56,976	38,403	189	137,268	4,306	0	0	510	398	5,214	142,901
1984-85	52,300	69,354	42,167	205	164,026	4,972	0	0	1,909	1,172	8,053	172,719
1985-86	61,950	81,163	44,607	445	188,165	9,331	0	0	2,233	2,247	13,811	201,229
1986-87	76,950	94,520	43,854	1,796	217,120	9,120	1,045	0	0	2,047	12,212	228,611
1987-88	81,050	103,899	52,558	2,492	239,999	8,438	1,045	0	0	2,257	11,740	250,809
1988-89	102,700	115,748	47,048	3,005	268,501	6,672	1,131	0	0	934	8,737	276,301
1989-90	118,550	127,681	40,207	3,072	289,510	4,364	1,446	0	0	0	5,810	294,562
1990-91	139,150	143,601	33,782	3,492	320,025	3,555	1,008	0	0	0	4,563	323,903
1991-92	152,300	158,059	35,031	3,501	348,891	3,535	0	0	0	0	3,535	351,885
1992-93	162,050	178,436	33,884	3,505	377,875	2,926	2,552	0	0	0	5,478	382,741
1993-94	166,000	203,373	30,866	3,497	403,736	5,019	5,649	0	0	0	10,668	413,975
1994-95	164,450	225,513	30,756	3,488	424,207	7,875	9,046	0	0	0	16,921	440,998
1995-96	166,100	252,411	30,801	3,478	452,790	9,514	6,986	310	0	0	16,810	469,547
1996-97	135,400	282,059	32,911	3,468	453,838	12,460	8,436	2,121	0	0	23,017	476,852
1997-98	112,300	293,987	30,302	3,456	440,045	14,590	9,356	3,176	0	0	27,122	467,291
1998-99	96,950	294,914	28,810	4,063	424,737	19,655	10,171	6,182	0	0	36,008	460,427
1999-00	99,850	293,250	27,115	3,427	423,642	21,464	6,008	5,168	0	0	32,640	456,406
2000-01	88,700	293,879	26,457	3,404	412,440	20,509	7,228	5,695	0	0	33,432	445,724

Note: Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

[1] Includes EMTNs.

Sources: *Bank of Canada Review*, Department of Finance.

Reference Table III

Average Weekly Domestic Market Trading in Government of Canada Securities, April 2000 to March 2001

		Marketable bonds					
	Treasury bills	3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	Total
				($ millions)			
April 2000	24,040	20,818	28,414	10,469	133	59,834	83,874
May 2000	22,164	20,815	28,243	9,279	317	58,654	80,818
June 2000	22,283	26,054	34,561	8,010	164	68,789	91,072
July 2000	18,019	21,866	29,557	5,486	223	57,132	75,151
August 2000	18,091	22,424	29,932	6,042	106	58,504	76,595
September 2000	20,040	33,329	31,958	8,542	240	74,069	94,109
October 2000	17,699	23,674	27,865	9,589	721	61,849	79,548
November 2000	17,730	25,885	27,710	7,853	198	61,646	79,376
December 2000	20,066	21,515	26,933	9,976	214	58,638	78,704
January 2001	17,006	32,129	32,658	9,787	187	74,761	91,767
February 2001	20,381	33,250	32,399	8,250	257	74,156	94,537
March 2001	23,401	39,957	35,199	8,954	180	84,290	107,691

Source: Bank of Canada, *Banking and Financial Statistics*.

Reference Table IV

Distribution of Domestic Holdings of Government of Canada Securities

PART A – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	17,932	395	8,242	8,666	716	1,436	2,273	730	40,390
1977	20,277	321	10,268	9,601	1,048	2,271	3,114	1,014	47,914
1978	22,740	403	12,001	9,896	1,537	3,738	4,017	1,721	56,053
1979	23,143	374	13,656	10,156	1,684	6,716	4,103	2,878	62,710
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,125	520	17,100	10,003	2,452	10,569	5,342	4,194	83,305
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,551	17,816	9,984	5,321	126,446
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,332	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,551
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,711	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207.250
1988	86,574	8,634	20,606	21,115	7,492	42,460	19,028	17,186	223,095
1989	81,549	11,402	21,133	20,804	9,854	48,037	23,950	17,840	234,569
1990	80,060	11,797	20,325	24,224	10,460	52,984	26,051	19,574	245,475
1991	72,880	11,580	22,370	35,792	12,091	57,846	33,054	21,015	266,628
1992	70,869	13,696	22,607	44,555	12,428	62,042	39,396	20,222	285,815
1993	61,163	10,359	23,498	60,242	11,229	69,917	45,321	18,397	300,126
1994	52,751	12,039	24,902	70,063	9,992	78,559	52,847	24,967	326,120
1995	48,733	12,048	23,590	76,560	10,947	87,484	59,044	26,324	344,730
1996	46,104	10,013	25,556	74,789	10,952	90,231	71,514	24,828	353,987
1997	39,872	10,470	27,198	67,715	7,054	95,102	79,445	25,429	352,285
1998	37,542	8,525	27,911	65,636	6,659	100,056	79,895	23,070	349,294
1999	33,464	9,290	29,075	57,880	6,884	108,084	81,318	28,351	354,346
2000	32,600	9,064	31,726	61,269	3,451	108,771	74,456	27,296	348,633

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART B – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	44.40	0.98	20.41	21.46	1.77	3.56	5.63	1.81	100.00
1977	42.32	0.67	21.43	20.04	2.19	4.74	6.50	2.12	100.00
1978	40.57	0.72	21.41	17.65	2.74	6.67	7.17	3.07	100.00
1979	36.90	0.60	21.78	16.20	2.69	10.71	6.54	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.76	0.62	20.53	12.01	2.94	12.69	6.41	5.03	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.78	4.35	13.33	11.95	4.39	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.39	4.15	9.75	7.73	3.09	18.76	9.43	6.72	100.00
1988	38.81	3.87	9.24	9.46	3.36	19.03	8.53	7.70	100.00
1989	34.77	4.86	9.01	8.87	4.20	20.48	10.21	7.61	100.00
1990	32.61	4.81	8.28	9.87	4.26	21.58	10.61	7.97	100.00
1991	27.33	4.34	8.39	13.42	4.53	21.70	12.40	7.88	100.00
1992	24.80	4.79	7.91	15.59	4.35	21.71	13.78	7.08	100.00
1993	20.38	3.45	7.83	20.07	3.74	23.30	15.10	6.13	100.00
1994	16.18	3.69	7.64	21.48	3.06	24.09	16.20	7.66	100.00
1995	14.14	3.49	6.84	22.21	3.18	25.38	17.13	7.64	100.00
1996	13.02	2.83	7.22	21.13	3.09	25.49	20.20	7.01	100.00
1997	11.32	2.97	7.72	19.22	2.00	27.00	22.55	7.22	100.00
1998	10.75	2.44	7.99	18.79	1.91	28.65	22.87	6.60	100.00
1999	9.44	2.62	8.21	16.33	1.94	30.50	22.95	8.00	100.00
2000	9.35	2.60	9.10	17.57	0.99	31.20	21.36	7.83	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART C – Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	171	125	1,964	4,219	52	44	515	193	7,283
1977	394	136	2,461	4,949	143	98	1,020	311	9,512
1978	576	198	3,567	5,517	193	261	1,554	519	12,385
1979	785	165	4,345	6,690	65	245	1,550	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,180	2,587	5,376	1,286	36,815
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,712	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,246
1988	20,196	7,414	9,945	15,224	5,614	7,648	9,133	7,726	82,900
1989	29,138	9,668	11,124	17,410	8,116	9,664	12,908	9,251	107,279
1990	36,443	10,756	10,574	17,841	8,976	11,737	13,298	9,388	119,013
1991	30,358	10,437	13,093	24,382	9,089	12,386	17,636	10,417	127,798
1992	32,840	11,254	14,634	27,989	9,646	13,639	19,907	8,726	138,635
1993	27,401	9,657	16,876	29,901	9,222	17,085	22,336	7,151	139,629
1994	17,476	8,499	18,973	30,415	6,879	14,385	22,021	10,631	129,279
1995	16,173	9,204	18,298	30,865	7,760	15,321	25,183	10,603	133,407
1996	10,438	8,285	17,593	23,470	5,493	13,530	32,752	6,264	117,825
1997	5,382	6,858	14,233	19,448	3,133	8,956	32,653	4,354	95,017
1998	2,398	6,215	10,729	15,974	2,392	4,570	32,508	1,700	76,486
1999	5,889	6,662	8,584	12,814	2,758	7,013	37,011	3,191	83,922
2000	6,187	6,735	8,090	9,188	574	6,766	31,260	2,415	71,215

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART D – Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	2.35	1.72	26.97	57.93	0.71	0.60	7.07	2.65	100.00
1977	4.14	1.43	25.87	52.03	1.50	1.03	10.72	3.27	100.00
1978	4.65	1.60	28.80	44.55	1.56	2.11	12.55	4.19	100.00
1979	5.34	1.12	29.58	45.55	0.44	1.67	10.55	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.23	13.98	7.05	34.98	8.64	7.03	14.60	3.49	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.58	10.44	13.98	16.60	5.38	6.94	13.85	7.22	100.00
1988	24.36	8.94	12.00	18.36	6.77	9.23	11.02	9.32	100.00
1989	27.16	9.01	10.37	16.23	7.57	9.01	12.03	8.62	100.00
1990	30.62	9.04	8.88	14.99	7.54	9.86	11.17	7.89	100.00
1991	23.75	8.17	10.25	19.08	7.11	9.69	13.80	8.15	100.00
1992	23.69	8.12	10.56	20.19	6.96	9.84	14.36	6.29	100.00
1993	19.62	6.92	12.09	21.41	6.60	12.24	16.00	5.12	100.00
1994	13.52	6.57	14.68	23.53	5.32	11.13	17.03	8.22	100.00
1995	12.12	6.90	13.72	23.14	5.82	11.48	18.88	7.95	100.00
1996	8.86	7.03	14.93	19.92	4.66	11.48	27.80	5.32	100.00
1997	5.66	7.22	14.98	20.47	3.30	9.43	34.37	4.58	100.00
1998	3.14	8.13	14.03	20.88	3.13	5.97	42.50	2.22	100.00
1999	7.02	7.94	10.23	15.27	3.29	8.36	44.10	3.80	100.00
2000	8.69	9.46	11.36	12.90	0.81	9.50	43.90	3.39	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART E – Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	1,277	270	6,278	4,447	664	1,392	1,758	537	16,623
1977	1,690	185	7,807	4,652	905	2,173	2,094	703	20,209
1978	1,929	205	8,434	4,379	1,344	3,477	2,463	1,202	23,433
1979	3,736	209	9,311	3,466	1,619	6,471	2,553	2,035	29,400
1980	4,890	267	10,541	2,502	2,152	8,814	3,130	2,736	35,032
1981	6,759	151	11,669	1,406	2,109	10,009	3,155	3,112	38,370
1982	7,374	337	12,945	1,199	1,931	11,907	4,169	3,455	43,317
1983	6,813	356	14,264	2,228	2,371	15,229	4,608	4,035	49,904
1984	9,906	508	13,669	2,167	2,095	20,163	5,434	4,668	58,610
1985	11,483	870	11,683	2,569	2,055	27,144	6,957	5,970	68,731
1986	9,827	1,384	10,407	2,618	2,568	31,295	8,250	7,877	74,226
1987	10,959	1,359	10,519	4,514	2,675	34,064	9,958	8,916	82,964
1988	11,501	1,220	10,661	5,891	1,878	34,812	9,895	9,460	85,318
1989	8,713	1,734	10,009	3,394	1,738	38,373	11,042	8,589	83,592
1990	8,174	1,041	9,751	6,383	1,484	41,247	12,753	10,186	91,019
1991	5,215	1,143	9,277	11,410	3,002	45,460	15,418	10,598	101,523
1992	2,147	2,442	7,973	16,566	2,782	48,403	19,489	11,496	111,298
1993	1,140	702	6,622	30,341	2,007	52,832	22,985	11,246	127,875
1994	1,764	3,540	5,929	39,648	3,113	64,174	30,826	14,336	163,330
1995	202	2,844	5,292	45,695	3,187	72,163	33,861	15,721	178,965
1996	1,276	1,728	7,963	51,319	5,459	76,701	38,762	18,564	201,772
1997	3,202	3,612	12,965	48,267	3,921	86,146	46,792	21,075	225,980
1998	6,814	2,310	17,182	49,662	4,267	95,486	47,387	21,370	244,478
1999	28	2,628	20,491	45,066	4,126	101,071	44,307	25,160	242,877
2000	775	2,329	23,636	52,081	2,877	102,005	43,196	24,881	251,780

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART F – Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	7.68	1.62	37.77	26.75	3.99	8.37	10.58	3.23	100.00
1977	8.36	0.92	38.63	23.02	4.48	10.75	10.36	3.48	100.00
1978	8.23	0.87	35.99	18.69	5.74	14.84	10.51	5.13	100.00
1979	12.71	0.71	31.67	11.79	5.51	22.01	8.68	6.92	100.00
1980	13.96	0.76	30.09	7.14	6.14	25.16	8.93	7.81	100.00
1981	17.62	0.39	30.41	3.66	5.50	26.09	8.22	8.11	100.00
1982	17.02	0.78	29.88	2.77	4.46	27.49	9.62	7.98	100.00
1983	13.65	0.71	28.58	4.46	4.75	30.52	9.23	8.09	100.00
1984	16.90	0.87	23.32	3.70	3.57	34.40	9.27	7.96	100.00
1985	16.71	1.27	17.00	3.74	2.99	39.49	10.12	8.69	100.00
1986	13.24	1.86	14.02	3.53	3.46	42.16	11.11	10.61	100.00
1987	13.21	1.64	12.68	5.44	3.22	41.06	12.00	10.75	100.00
1988	13.48	1.43	12.50	6.90	2.20	40.80	11.60	11.09	100.00
1989	10.42	2.07	11.97	4.06	2.08	45.91	13.21	10.27	100.00
1990	8.98	1.14	10.71	7.01	1.63	45.32	14.01	11.19	100.00
1991	5.14	1.13	9.14	11.24	2.96	44.78	15.19	10.44	100.00
1992	1.93	2.19	7.16	14.88	2.50	43.49	17.51	10.33	100.00
1993	0.89	0.55	5.18	23.73	1.57	41.32	17.97	8.79	100.00
1994	1.08	2.17	3.63	24.27	1.91	39.29	18.87	8.78	100.00
1995	0.11	1.59	2.96	25.53	1.78	40.32	18.92	8.78	100.00
1996	0.63	0.86	3.95	25.43	2.71	38.01	19.21	9.20	100.00
1997	1.42	1.60	5.74	21.36	1.74	38.12	20.71	9.33	100.00
1998	2.79	0.94	7.03	20.31	1.75	39.06	19.38	8.74	100.00
1999	0.01	1.08	8.44	18.56	1.70	41.61	18.24	10.36	100.00
2000	0.31	0.93	9.39	20.69	1.14	40.51	17.16	9.88	100.00

Note: Because of timing and valuation differences, *The National Balance Sheet Accounts* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report are on a par-value basis – that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

1 Includes bonds denominated in foreign currencies.

2 Includes Quebec savings banks, credit unions and caisses populaires, trust companies and mortgage loan companies.

3 Includes investment dealers, mutual funds, property and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

4 Includes federal government holdings of its own debt, provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

5 May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts.*

Reference Table V

Non-Resident (Direct) Holdings of Government of Canada Debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada Bills	Total	Total as per cent of total market debt
		(C$ billions)		
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	8.7
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.6
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.0
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.5
1987	30.3	4.7	35.0	15.3
1988	33.0	9.3	42.3	16.9
1989	41.3	15.7	57.0	20.6
1990	49.9	13.3	63.2	21.5
1991	57.6	16.1	73.7	22.8
1992	63.6	23.0	86.6	24.6
1993	80.1	28.3	108.4	28.3
1994	79.3	34.0	113.3	27.4
1995	73.7	39.2	112.9	25.6
1996	84.1	37.7	121.8	25.9
1997	91.5	28.7	120.2	25.2
1998	94.1	22.4	116.5	24.9
1999	85.9	21.8	107.7	23.4
2000	84.6	16.6	101.2	22.2
2001	83.4	10.4	93.8	21.0

Note: Numbers may not add due to rounding.

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities.*

Reference Table VI

Fiscal 2000-01 Treasury Bill Program

Settlement	Maturing					New issues					Net increment			Average tender yields			
Date	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
	($ millions)													(%)			
06-Apr-2000	5,250	–	–	–	5,250	–	–	–	1,900	–	-5,250	-5,250	94,600				
13-Apr-2000	–	3,600	3,400	–	7,000	–	3,800	1,700	1,700	7,200	200	-5,050	94,800		5.35	5.58	5.87
20-Apr-2000	2,000	–	–	–	2,000	–	–	–	1,600	–	-2,000	-7,050	92,800				
27-Apr-2000	–	3,800	–	3,000	6,800	–	3,400	1,600	–	-6,600	-200	-7,250	92,600		5.45	5.74	5.99
11-May-2000	–	3,800	3,200	–	7,000	–	3,000	1,500	1,400	6,000	-1,000	-8,250	91,600		5.66	5.9	6.25
25-May-2000	–	3,800	–	2,900	6,700	–	3,000	1,500	1,400	6,000	-700	-8,950	90,900		5.75	6.01	6.33
08-Jun-2000	–	4,000	3,100	–	7,100	–	2,900	1,300	1,500	5,500	-1,600	-10,550	89,300		5.64	5.8	6.11
22-Jun-2000	–	4,200	–	3,300	7,500	–	2,900	1,300	1,600	5,500	-2,000	-12,550	87,300		5.55	5.84	6.04
06-Jul-2000	–	4,200	3,500	–	7,700	–	2,900	1,300	1,700	5,500	-2,200	-14,750	85,100		5.55	5.77	5.99
20-Jul-2000	–	3,800	–	3,700	7,500	–	2,900	1,300	1,800	5,500	-2,000	-16,750	83,100		5.63	5.82	6.02
03-Aug-2000	–	3,400	3,600	–	7,000	–	3,200	1,400	–	6,000	-1,000	-17,750	82,100		5.65	5.79	5.97
17-Aug-2000	–	3,000	–	4,000	7,000	–	3,200	1,400	1,900	6,000	-1,000	-18,750	81,100		5.66	5.79	5.92
24-Aug-2000	–	–	–	–	–	3,000	–	–	2,000	3,000	3,000	-15,750	84,100	5.69			
31-Aug-2000	–	3,000	3,600	–	6,600	2,000	3,500	1,500	–	8,500	1,900	-13,850	86,000	5.74	5.62	5.77	5.92
07-Sep-2000	3,000	–	–	–	3,000	–	–	–	2,000	–	-3,000	-16,850	83,000				
14-Sep-2000	2,000	2,900	–	3,900	8,800	–	3,200	1,400	2,000	6,000	-2,800	-19,650	80,200		5.6	5.75	5.89
28-Sep-2000	–	2,900	3,500	–	6,400	–	3,200	1,400	1,900	6,000	-400	-20,050	79,800		5.56	5.72	5.81
12-Oct-2000	–	2,900	–	3,400	6,300	–	3,200	1,400	–	6,000	-300	-20,350	79,500		5.62	5.77	5.87
26-Oct-2000	–	2,900	3,100	–	6,000	–	3,200	1,400	1,800	6,000	–	-20,350	79,500		5.62	5.74	5.82
09-Nov-2000	–	3,200	–	3,200	6,400	–	3,200	1,400	1,600	6,000	-400	-20,750	79,100		5.68	5.82	5.93
23-Nov-2000	–	3,200	2,800	–	6,000	–	3,200	1,400	1,600	6,000	–	-20,750	79,100		5.74	5.88	5.97
07-Dec-2000	–	3,500	–	3,100	6,600	–	3,200	1,400	1,600	6,000	-600	-21,350	78,500		5.55	5.65	5.67
21-Dec-2000	–	3,200	2,600	–	5,800	–	3,200	1,400	1,700	6,000	200	-21,150	78,700		5.56	5.58	5.56
04-Jan-2001	–	3,200	–	3,500	6,700	–	3,500	1,500	–	6,500	-200	-21,350	78,500		5.45	5.38	5.24
18-Jan-2001	–	3,200	2,700	–	5,900	–	3,800	1,600	1,400	7,000	1,100	-20,250	79,600		5.24	5.18	5.10
01-Feb-2001	–	3,200	–	3,600	6,800	–	4,100	1,700	1,700	7,500	700	-19,550	80,300		5.14	5.05	4.97
15-Feb-2001	–	3,200	2,900	–	6,100	–	4,100	1,700	–	7,500	1,400	-18,150	81,700		5.13	5.01	4.98
01-Mar-2001	–	3,200	–	3,600	6,800	2,000	4,100	1,700	1,800	9,500	2,700	-15,450	84,400	5.07	4.8	4.74	4.72
15-Mar-2001	–	3,200	2,800	–	6,000	–	4,100	1,700	1,800	7,500	1,500	-13,950	85,900		4.66	4.64	4.64
29-Mar-2001	–	3,200	–	3,500	6,700	2,000	4,100	1,700	–	9,500	2,800	-11,150	88,700	4.83	4.6	4.58	4.58
Total	**12,250**	**87,700**	**40,800**	**44,700**	**185,450**	**9,000**	**88,100**	**38,600**	**39,400**	**174,300**	**-11,150**						

[1] Cash management bill.

[2] Outstanding.

Source: Bank of Canada.

Reference Table VII

Fiscal 2000-01 Treasury Bill Auction Results

Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail	Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail
	(months)	($ millions)	($)	(%)		(basis points)		(months)	($ millions)	($)	(%)		(basis points)
13-Apr-2000	3	3,800	98.584	5.351	1.82	0.9	10-Oct-2000	3	3,200	98.513	5.62	2.05	0.8
	6	1,700	97.496	5.579	2.009	1.1		6	1,400	97.204	5.769	2.721	0.3
	12	1,700	94.673	5.868	2.082	0.8		12	1,400	94.467	5.873	2.455	0.6
25-Apr-2000	3	3,400	98.558	5.449	1.929	0.8	24-Oct-2000	3	3,200	98.514	5.619	1.903	0.9
	6	1,600	97.217	5.741	2.376	0.4		6	1,400	97.426	5.741	2.522	0.3
	12	1,600	94.36	5.993	2.056	0.7		12	1,400	94.717	5.817	2.439	0.5
09-May-2000	3	3,000	98.502	5.663	1.956	2.1	07-Nov-2000	3	3,200	98.499	5.677	1.945	0.6
	6	1,500	97.357	5.899	1.926	2.1		6	1,400	97.178	5.824	2.435	0.6
	12	1,500	94.347	6.248	2.04	4.1		12	1,400	94.418	5.928	2.195	0.4
23-May-2000	3	3,000	98.479	5.751	2.234	0.8	21-Nov-2000	3	3,200	98.483	5.736	2.37	0.6
	6	1,500	97.091	6.008	2.076	1.2		6	1,400	97.367	5.875	2.763	0.5
	12	1,500	94.067	6.325	1.999	0.8		12	1,400	94.582	5.974	2.588	0.5
06-Jun-2000	3	2,900	98.517	5.64	2.228	0.8	05-Dec-2000	3	3,200	98.532	5.549	2.311	0.6
	6	1,300	97.402	5.796	1.869	1.2		6	1,400	97.261	5.647	2.535	0.6
	12	1,300	94.464	6.112	2.023	1.3		12	1,400	94.651	5.667	2.182	0.5
20-Jun-2000	3	2,900	98.531	5.551	2.237	0.9	19-Dec-2000	3	3,200	98.53	5.557	1.787	0.8
	6	1,300	97.172	5.837	2.229	0.9		6	1,400	97.496	5.579	2.122	1.0
	12	1,300	94.279	6.035	2.048	0.3		12	1,400	94.94	5.558	2.181	0.5
04-Jul-2000	3	2,900	98.531	5.551	1.949	0.9	03-Jan-2001	3	3,500	98.559	5.445	2.062	0.7
	6	1,300	97.414	5.767	2.067	1.1		6	1,500	97.389	5.377	2.458	0.3
	12	1,300	94.57	5.988	1.948	0.7		12	1,500	95.032	5.242	2.235	1.2
18-Jul-2000	3	2,900	98.512	5.625	2.077	1.2	16-Jan-2001	3	3,800	98.614	5.235	1.909	1.5
	6	1,300	97.182	5.816	2.074	0.6		6	1,600	97.671	5.181	2.244	0.9
	12	1,300	94.335	6.022	2.061	0.7		12	1,600	95.334	5.104	1.942	1.0
01-Aug-2000	3	3,200	98.506	5.647	1.735	0.7	30-Jan-2001	3	4,100	98.638	5.142	1.63	1.7
	6	1,400	97.402	5.794	2.027	1.4		6	1,700	97.546	5.045	2.238	0.5
	12	1,400	94.59	5.965	2.067	0.5		12	1,700	95.284	4.963	2.1	0.9
15-Aug-2000	3	3,200	98.504	5.656	1.863	0.4	13-Feb-2001	3	4,100	98.641	5.13	1.564	1.6
	6	1,400	97.194	5.79	2.359	0.5		6	1,700	97.744	5.014	1.852	1.1
	12	1,400	94.423	5.923	1.982	0.9		12	1,700	95.444	4.978	1.749	1.2
29-Aug-2000	3	3,500	98.513	5.622	2.332	0.7	27-Feb-2001	3	4,100	98.727	4.804	1.6	2.0
	6	1,500	97.415	5.766	1.921	1.1		6	1,700	97.692	4.737	1.594	0.9
	12	1,500	94.631	5.917	2.026	1.2		12	1,700	95.506	4.718	1.524	1.3
12-Sep-2000	3	3,200	98.519	5.599	2.3	0.9	13-Mar-2001	3	4,100	98.763	4.664	1.972	1.3
	6	1,400	97.215	5.745	2.551	0.6		6	1,700	97.909	4.641	1.72	1.4
	12	1,400	94.453	5.889	2.235	0.4		12	1,700	95.742	4.638	1.621	1.1
26-Sep-2000	3	3,200	98.528	5.564	2.367	0.6	27-Mar-2001	3	4,100	98.779	4.604	1.453	2.3
	6	1,400	97.436	5.717	2.38	0.6		6	1,700	97.769	4.576	1.679	2.4
	12	1,400	94.723	5.81	2.475	0.7		12	1,700	95.634	4.578	1.669	1.7
							Total		165,300				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

Source: Bank of Canada.

Reference Table VIII

Fiscal 2000-01 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Fixed-coupon bonds						
2000	**2000**					
April 19	April 24	June 1, 2029		1,900		1,900
April 26	May 1	June 1, 2011	1,575	2,600		1,025
May 10	May 15	September 1, 2005		2,800		2,800
May 10	May 15				463	-463
June 7	June 15	December 1, 2002		3,600		3,600
	July 4*		3,075			-3,075
June 26	August 1	June 1, 2011		2,600		2,600
June 26	August 1				500	-500
August 9	August 15	September 1, 2005		2,700		2,700
	September 1*		8,800			-8,800
September 13	September 15	December 1, 2002		3,500		3,500
October 11	October 16	June 1, 2029		1,900		1,900
October 11	October 16				369	-369
October 25	October 30	June 1, 2011		2,400		2,400
November 8	November 14	September 1, 2006		2,500		2,500
November 8	November 14				500	-500
November 22	November 24	June 1, 2003		3,500		3,500
	December 1		7,000			-7,000
	December 15*		500			-500
2001						
January 16	January 18				500	-500
January 24	January 29	June 1, 2011		2,500		2,500
January 24	January 29				500	-500
	February 1*		425			-425
February 7	February 12	September 1, 2006		2,500		2,500
February 7	February 12				500	-500
February 13	February 15				1,000	-1,000
	March 1*		12,567			-12,567
March 13	March 15				1,000	-1,000
March 14	March 16	June 1, 2003		3,500		3,500
Real return bonds						
2000						
May 31	June 5	December 1, 2031		350		350
August 30	September 5	December 1, 2031		350		350
December 6	December 11	December 1, 2031		350		350
2001						
February 28	March 5	December 1, 2031		350		350
Total fiscal year 2000-2001			**33,942**	**39,900**	**5,332**	**626**

* Maturing date.

Source: Bank of Canada.

Reference Table IX
Fiscal 2000-01 Marketable Bond Auction Results

Auction date	Term	Maturity date	Coupon rate	Issue amount	Average price	Average yield	Auction coverage	Tail
	(years)		(%)	($ millions)	($)	(%)		(basis points)
19-Apr-2000	30	01-Jun-2029	5.76	1,900	99.923	5.755	2.21	4.4
26-Apr-2000	10	01-Jun-2011	6.00	2,600	98.987	6.128	2.68	1.0
10-May-2000	5	01-Sep-2005	6.00	2,800	98.33	6.374	2.37	0.5
31-May-2000	30	01-Dec-2031	4.00*	350	103.842	3.790	3.29	n.a.
7-Jun-2000	2	01-Dec-2002	6.00	3,600	99.857	6.065	2.44	0.8
26-Jul-2000	10	01-Jun-2011	6.00	2,600	100.79	5.899	2.47	1.1
9-Aug-2000	5	01-Sep-2005	6.00	2,700	100.561	5.869	2.49	0.4
30-Aug-2000	30	01-Dec-2031	4.00*	350	106.293	3.660	3.32	n.a.
13-Sep-2000	2	01-Dec-2002	6.00	3,500	100.467	5.768	2.38	0.5
11-Oct-2000	30	01-Jun-2029	5.75	1,900	102.293	5.588	2.36	1.1
25-Oct-2000	10	01-Jun-2011	6.00	2,400	102.506	5.681	2.50	0.8
8-Nov-2000	5	01-Sep-2006	5.75	2,500	99.013	5.956	2.44	0.9
22-Nov-2000	2	01-Jun-2003	5.75	3,500	99.844	5.818	2.69	0.4
6-Dec-2000	30	01-Dec-2031	4.00*	350	110.415	3.450	2.89	n.a.
24-Jan-2001	10	01-Jun-2011	6.00	2,500	103.694	5.525	2.50	1.4
7-Feb-2001	5	01-Sep-2006	5.75	2,500	102.394	5.247	2.55	0.2
28-Feb-2001	30	01-Dec-2031	4.00*	350	111.281	3.405	2.72	n.a.
14-Mar-2001	2	01-Jun-2003	5.75	3,500	102.207	4.684	2.17	0.6
Total				**39,900**				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

* Real return bonds.

Source: Department of Finance.

Reference Table X

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2001

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	($ millions)	(%)		($ millions)	(%)
Fixed-coupon					
01-May-2001	1,325	13.00	01-Oct-2006	958	14.00
01-Jun-2001	5,350	4.50	01-Dec-2006	9,100	7.00
01-Jun-2001	2,708	9.75	01-Mar-2007	319	13.75
01-Sep-2001	10,600	7.00	01-Jun-2007	9,500	7.25
01-Oct-2001	914	9.50	01-Oct-2007	611	13.00
01-Dec-2001	7,000	5.25	01-Mar-2008	750	12.75
01-Dec-2001	3,850	9.75	01-Jun-2008	9,200	6.00
02-Feb-2002	213	8.75	01-Jun-2008	3,258	10.00
15-Mar-2002	339	15.50	01-Oct-2008	628	11.75
01-Apr-2002	5,450	8.50	01-Mar-2009	400	11.50
01-May-2002	1,831	10.00	01-Jun-2009	9,400	5.50
01-Jun-2002	7,200	5.75	01-Jun-2009	673	11.00
15-Jul-2002	10,200	5.50	01-Oct-2009	756	10.75
01-Sep-2002	7,100	6.00	01-Mar-2010	300	9.75
01-Dec-2002	1,222	11.25	01-Jun-2010	10,400	5.50
15-Dec-2002	2,094	11.75	01-Jun-2010	2,474	9.50
01-Feb-2003	7,000	5.75	01-Oct-2010	184	8.75
01-Jun-2003	6,900	7.25	01-Mar-2011	1,256	9.00
01-Sep-2003	9,700	5.25	01-Jun-2011	10,100	6.00
01-Oct-2003	559	9.50	01-Jun-2011	669	8.50
01-Dec-2003	8,800	7.50	15-Mar-2014	3,125	10.25
01-Feb-2004	1,882	10.25	01-Jun-2015	2,327	11.25
01-Jun-2004	7,900	6.50	31-Dec-2019	25	10.19
01-Jun-2004	541	13.50	15-Mar-2021	1,797	10.50
01-Sep-2004	10,850	5.00	01-Jun-2021	4,435	9.75
01-Oct-2004	586	10.50	01-Jun-2022	2,399	9.25
01-Dec-2004	7,700	9.00	01-Jun-2023	8,200	8.00
01-Mar-2005	1,057	12.00	01-Jun-2025	8,900	9.00
01-Sep-2005	11,100	6.00	01-Jun-2027	9,600	8.00
01-Sep-2005	1,065	12.25	01-Jun-2029	12,000	5.75
01-Dec-2005	8,000	8.75			
01-Mar-2006	626	12.50			
01-Sep-2006	5,000	5.75	**Total**	**280,406**	

Reference Table X *(cont'd)*

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2001

Maturity date	Amount	Coupon rate
	($ millions)	(%)
Real return bonds		
1-Dec-2021	5,175	4.25
1-Dec-2026	5,250	4.25
1-Dec-2031	3,050	4.00
Total[1]	**13,475**	

[1] Real return bond figures show gross issue amount only – the consumer price index adjustment is not shown here.

Source: Bank of Canada.

Reference Table XI

Government of Canada Swaps Outstanding as at March 31, 2001

Domestic interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	($ millions)
01-Jun-2001	9.75	250
01-Feb-2004	10.25	50
Total		**300**

Foreign interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	(US$ millions)
22-Jan-2002	5.125	300
19-Nov-2007	4.00	25
05-Nov-2008	5.25	200
05-Nov-2008	5.25	500
05-Nov-2008	5.25	500
Total		**1,525**

Cross-currency swaps of foreign obligations

Maturity date	Notional amount
	(US$ millions)
12-Jun-2001	26
16-Jul-2003	65
26-Nov-2004	495
26-Nov-2004	341
30-Nov-2004	63
30-Nov-2004	25
22-Dec-2004	76
03-Oct-2007	319
31-Jan-2008	44
Total	**1,454**

Reference Table XI *(cont'd)*
Government of Canada Swaps Outstanding as at March 31, 2001

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
04-Sep-2001	1,000	USD	01-Sep-2005	100	USD
01-Apr-2002	50	USD	01-Sep-2005	150	EUR
01-May-2002	100	USD	23-Nov-2005	150	USD
01-Sep-2002	1,000	USD	01-Dec-2005	650	USD
01-Sep-2002	250	EUR	01-Dec-2005	200	EUR
28-Oct-2002	100	USD	01-Mar-2006	50	USD
15-Dec-2002	102	EUR	01-Mar-2006	96	EUR
15-Dec-2002	600	USD	01-Oct-2006	54	EUR
01-Feb-2003	52	EUR	01-Oct-2006	100	USD
01-Jun-2003	87	EUR	30-Oct-2006	250	USD
01-Jun-2003	125	USD	23-Nov-2006	150	USD
01-Sep-2003	105	EUR	01-Dec-2006	50	EUR
01-Sep-2003	150	USD	01-Mar-2007	24	EUR
01-Oct-2003	65	USD	01-Jun-2007	248	EUR
01-Oct-2003	182	EUR	01-Jun-2007	750	USD
30-Nov-2003	100	USD	01-Oct-2007	166	EUR
01-Dec-2003	156	EUR	01-Mar-2008	225	USD
01-Dec-2003	520	USD	01-Mar-2008	250	USD
01-Feb-2004	208	EUR	01-Jun-2008	800	USD
01-Feb-2004	525	USD	30-Sep-2008	50	USD
30-Mar-2004	100	USD	01-Oct-2008	190	USD
01-Jun-2004	350	USD	01-Mar-2009	535	USD
01-Jun-2004	564	EUR	01-Jun-2009	505	USD
01-Sep-2004	50	EUR	01-Oct-2009	440	EUR
01-Oct-2004	125	USD	1-Mar-2010	185	EUR
01-Oct-2004	212	EUR	01-Jun-2010	76	YEN
23-Nov-2004	100	USD	01-Jun-2010	540	EUR
01-Mar-2005	565	USD	01-Oct-2010	260	EUR
			Total	**14,789**	

[1] Refers to the coupon of the underlying bond that was swapped.

Source: Department of Finance.

Reference Table XII

Bond Buyback Program – Operations 2000-01

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
04-May-2000	October 1, 2004	10.50	95
	March 1, 2005	12.00	140
	September 1, 2005	12.25	15
	March 1, 2006	12.50	213
	Total		**463**
20-Jul-2000	October 1, 2010	8.75	57
	March 1, 2011	9.00	433
	June 1, 2011	8.50	10
	Total		**500**
05-Oct-2000	March 15, 2021	10.50	3
	June 1, 2021	9.75	215
	June 1, 2022	9.25	151
	Total		**369**
2-Nov-2000	February 1, 2004	10.25	95
	October 1, 2004	10.50	30
	March 1, 2005	12.00	116
	March 1, 2006	12.50	136
	October 1, 2006	14.00	27
	March 1, 2007	13.75	6
	October 1, 2007	13.00	89
	Total		**500**
18-Jan-2001	March 1, 2001	10.50	8
	June 1, 2001	4.50	240
	June 1, 2001	9.75	252
	Total		**500**
1-Feb-2001	October 1, 2008	11.75	17
	October 1, 2009	10.75	322
	October 1, 2010	8.75	11
	March 1, 2011	9.00	103
	March 15, 2014	10.25	25
	June 1, 2015	11.25	23
	Total		**500**
Total buyback program for 2000-2001			**2,832**

Source: Department of Finance.

Reference Table XIII

Canada Savings Bonds and Canada Premium Bonds, Fiscal 1983-1984 to Fiscal 2000-01

Fiscal year	Gross sales	Net change	Outstanding at fiscal year end
		($ millions)	
1983-84	11,584	5,650	38,403
1984-85	12,743	3,764	42,167
1985-86	15,107	2,440	44,607
1986-87	9,191	-22	44,585
1987-88	17,450	8,921	53,506
1988-89	14,962	-5,456	48,050
1989-90	9,338	-6,813	41,237
1990-91	6,720	-6,500	34,737
1991-92	9,588	1,151	35,888
1992-93	9,235	-1,172	34,716
1993-94	5,364	-3,089	31,627
1994-95	7,506	-96	31,531
1995-96	4,612	10	31,541
1996-97	5,747	2,050	33,591
1997-98	4,951	-2,796	30,795
1998-99	4,844	-2,187	28,608
1999-00	2,669	-1,510	27,098
2000-01	3,188	-531	26,567

Note: Figures are in accordance with Bank of Canada audited reports, which may vary from Public Accounts reports due to differences in classification.

Source: Bank of Canada.

Reference Table XIV

Crown Corporation Borrowings as at March 31, 2001

Borrowings from the market

Corporation	1993	1994	1995	1996	1997	1998	1999	2000	2001
					($ millions)				
Export Development Corporation	6,983	7,793	7,515	7,673	7,820	10,077	12,967	16,888	18,406
Canadian Wheat Board[1]	6,966	7,283	7,321	6,377	6,474	6,698	6,786	542	425
Business Development Bank of Canada	2,352	2,602	2,723	3,045	3,371	3,839	4,223	4,723	5,102
Farm Credit Corporation	797	863	990	1,582	1,926	3,026	4,317	5,083	5,695
Canadian National[1]	1,905	2,249	2,331	–	–	–	–	–	
Canada Mortgage and Housing Corporation	152	1,573	3,630	5,906	7,866	9,934	10,633	10,801	11,672
Canada Development Investment Corporation	594	473	–	–	–	–	–	–	–
Petro-Canada Ltd.	455	501	504	490	432	443	471	338	–
Petro-Canada[1]	–	–	–	–	–	–	–	–	–
Canada Ports Corporation	188	–	–	–	–	3	79	69	–
Other	97	239	235	297	226	258	222	196	100
Total	**20,489**	**23,576**	**25,249**	**25,370**	**28,115**	**34,278**	**39,698**	**38,640**	**41,400**

[1] This corporation is no longer a Crown corporation.

Source: *Public Accounts of Canada*.

Borrowings from the Consolidated Revenue Fund

Corporation	1993	1994	1995	1996	1997	1998	1999	2000	2001
					($ millions)				
Canada Mortgage and Housing Corporation	8,181	8,075	7,835	7,263	6,938	6,708	6,298	6,152	5,852
Canada Deposit Insurance Corporation	3,085	3,151	2,160	1,627	855	395	–	–	–
Farm Credit Corporation	2,420	2,488	2,524	2,310	2,507	1,877	1,041	805	578
Other	819	415	307	233	204	179	551	77	84
Total	**14,505**	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**	**7,890**	**7,034**	**6,514**

Note: Figures do not include "allowance for valuation."

Source: Public Works and Government Services Canada data.

Debt Management Report

2001–2002

Canada

Debt Management Report

2001-2002

Department of Finance Canada
Ministère des Finances Canada

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Foreword by the Minister of Finance

I am pleased to table before Parliament the *Debt Management Report* of the Government of Canada for fiscal year 2001-02. This report provides a detailed account of the federal government's debt operations – the largest component of net debt – including the composition of the debt, its distribution, and the mechanisms and activities that ensure its prudent management in the interests of Canadians.

In 2001-02 the federal government recorded its fifth consecutive budget surplus – the first time this has happened in 50 years. As with each of the preceding four years, this surplus went to reduce our net debt, including market debt. Over this period Canada's net debt has been reduced by almost $47 billion, and our debt-to-GDP (gross domestic product) ratio now stands at just over 49 per cent, down from its peak of about 71 per cent in 1995-96.

These debt reduction efforts mean that the Government is paying $3 billion less each year in interest service charges. These are funds that are now being used to meet the priorities of Canadians. As well, reducing our debt means that Canada is less vulnerable to interest rate shocks sparked by events beyond our borders.

Despite our progress in this area, there is more work to be done. Interest payments on our net debt, which account for almost 22 cents of every revenue dollar taken in by the Government, are still the largest single expenditure item in our budget.

For this reason, the Government remains fully committed to prudent management of the nation's finances. Sound financial management is a key part of our strategy to sustain an economic environment that can offer Canadians a better standard of living – more jobs and higher incomes – and a better quality of life.

This report is designed to provide Canadians with timely, comprehensive and transparent information about how the debt is managed so they can hold the Government accountable for its decisions – decisions that affect the long-term financial security of the nation and the well-being of individuals.

The Honourable John Manley, P.C., M.P.
Minister of Finance
Ottawa, December 2002

Purpose of the Report

The *Debt Management Report* provides a detailed account of the federal government's borrowing and cash management operations in the past fiscal year (April 1, 2001 to March 31, 2002).

Debt-servicing costs are the largest spending program of the federal government, and the effective management of the programs that give rise to these costs is important to all Canadians. This report provides a comprehensive account of the context within which the debt is managed, its composition and changes during the year, and actions taken on strategic initiatives set out in the 2001-02 *Debt Management Strategy*, which was published before the start of the fiscal year.

Timely and transparent information of this kind is of use to market participants and ensures public accountability. To this end, the *Debt Management Strategy* and the *Debt Management Report* are tabled annually in Parliament and are available on the Department of Finance Web site at www.fin.gc.ca.

Highlights of 2001-2002

In 2001-02 the federal government continued to reduce its level of indebtedness. The Government's net public debt was reduced to $536.5 billion, which includes a $5.8-billion reduction in interest-bearing debt, a $3.0-billion decline in other liabilities and a $0.1-billion increase in assets. Net public debt is down $46.7 billion from its peak in 1996-97. Net public debt as a percentage of gross domestic product (GDP) dropped to 49.1 per cent in 2001-02 from a peak of 70.9 per cent in 1995-96. This is the sixth consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1984-85. This year alone debt-servicing charges were down $4.4 billion as a result of the decline of $5.8 billion in interest-bearing debt and a decline of 70 basis points, down to 6.9 per cent, in the average interest rate on that debt.

The Government's principal debt strategy objectives for 2001-02 continued to be the maintenance of low-cost, stable financing and the maintenance and enhancement of the functioning of the Government of Canada securities market. These objectives were reflected in a number of specific initiatives, which were set out in the *Debt Management Strategy*, published in March 2001. The major focus of the 2001-02 initiatives was to enhance the functioning of the market for Government of Canada securities in an environment of declining borrowing needs. Other important initiatives involved improving risk management through the introduction of new frameworks for cash and reserves management.

All of the 2001-02 *Debt Management Strategy* initiatives were successfully implemented over the course of the year. In addition, based on feedback from market participants, supplementary actions were taken to further enhance the functioning of the Government of Canada securities market. A summary of the 2001-02 *Debt Management Strategy* initiatives and the Government's actions can be found on pages 17 and 18 of this report. The remainder of the report provides detailed information on the Government's borrowing programs and debt strategy initiatives.

2001-2002 Debt Management Environment

Changes in the level of the Government's debt and its annual debt costs are affected by developments in two areas: the Government's fiscal results and the path of interest rates over the year. This section provides a brief summary of these developments and their consequences.

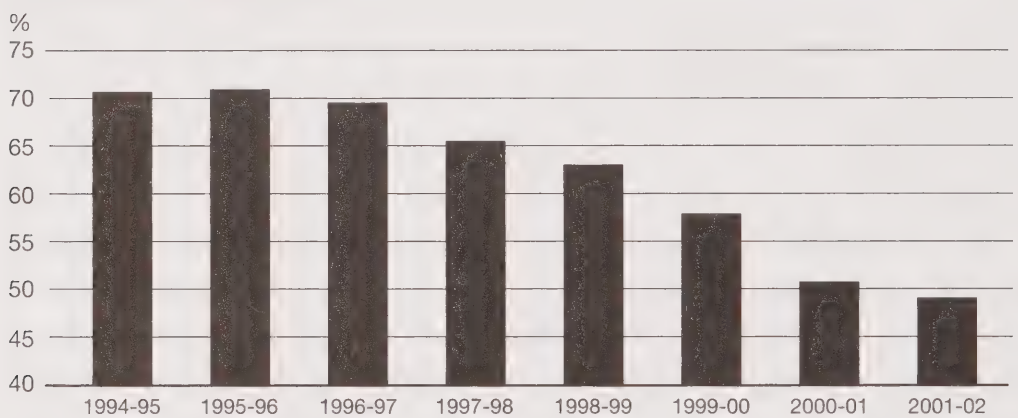
Fiscal Results

Budgetary Results

The Government recorded a budgetary surplus of $8.9 billion.

In 2001-02 the Government recorded a budgetary surplus of $8.9 billion, including a $5.8-billion decline in interest-bearing debt, a $3.0-billion reduction in other liabilities and a $0.1-billion increase in assets. This followed revised surpluses of $3.8 billion in 1997-98, $3.1 billion in 1998-99, $12.7 billion in 1999-2000, and $18.1 billion in 2000-01.[1] Over the past five years the Government's net public debt has been reduced by $46.7 billion. It stood at 49.1 per cent of GDP in 2001-02, down from a peak of 70.9 per cent in 1995-96. This ratio is generally recognized as the most appropriate indicator of the debt burden as it measures debt relative to the ability of the Government and the country's taxpayers to finance it. In 2001-02 the net debt-to-GDP ratio declined by 2.1 percentage points. This is the sixth consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1984-85 (see Chart 1).

Chart 1
Net Debt-to-GDP Ratio



Source: Department of Finance.

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[1] The Canada Customs and Revenue Agency (CCRA) collects personal income taxes on behalf of the Government and all provincial and territorial governments except Quebec. On January 29, 2002, the CCRA announced it had identified a problem in tax accounting that resulted in overpayments to provinces under the tax collection agreements. On September 4, 2002, the Minister of Finance announced that the Government of Canada would recover $1.4 billion of the amounts overpaid for the years 1997 to 1999 and use the money to pay down the debt. The net present value of these amounts has been recast to the fiscal years to which they apply. In addition, once the problem was discovered, the federal government took immediate action to prevent further overpayments related to 2000 and subsequent taxation years. This has resulted in a transfer of $1 billion from the tax collection agreements with respect to taxation year 2000 to budgetary revenues in 2000-01. As a result, the budgetary surplus has been revised upward beginning in 1997-98.

Financial Requirements/Source

There was a financial source, including foreign exchange transactions, of $2.9 billion.

The budgetary surplus of $8.9 billion, including a net requirement of funds from non-budgetary transactions of $4.2 billion, produced a financial source (excluding foreign exchange transactions) of $4.7 billion, following a financial source of $19.0 billion in 2000-01 and $14.6 billion in 1999-2000. The results for 2001-02 mark the sixth consecutive year that the Government has recorded a financial source (excluding foreign exchange transactions). Including foreign exchange transactions, primarily relating to supplementing foreign exchange reserves, the net financial source was $2.9 billion in 2001-02. This financial source was used, in conjunction with the reduction in cash balances, to reduce market debt by $4.1 billion.

Canada is the only G-7 nation to record a financial source for six consecutive years.

Financial requirements/source (excluding foreign exchange transactions) is a measure of the Government's financial position that is broadly comparable to the measure of budgetary balance used by other major industrialized countries, including the United States. On this basis, Canada is the only Group of Seven (G-7) country to report a financial source for six consecutive years.

The Budgetary Surplus and Financial Source, 2001-02

	($ billions)
Budgetary surplus	8.9
Net source of funds from non-budgetary transactions	-4.2
Financial source (excluding foreign exchange transactions)	4.7
Net requirement of funds from foreign exchange transactions	-1.8
Net financial source	2.9

The budgetary balance is presented on a modified accrual basis of accounting, recording government liabilities when they are incurred, regardless of when the cash payment is made, and recording tax revenues only when the cash is received.

In contrast, financial requirements/source measures the difference between cash coming in to the Government and cash going out. It differs from the budgetary balance in that it includes transactions in loans, investments and advances, federal employees' pension accounts, other specified purpose accounts and changes in other financial assets and liabilities. These activities are included as part of non-budgetary transactions.

Composition of the Federal Debt

There are several measures of debt.

Reports on the federal government's debt and debt management strategy use certain terms to describe the debt: gross public debt, market debt, non-market debt and net public debt.

Gross Public Debt

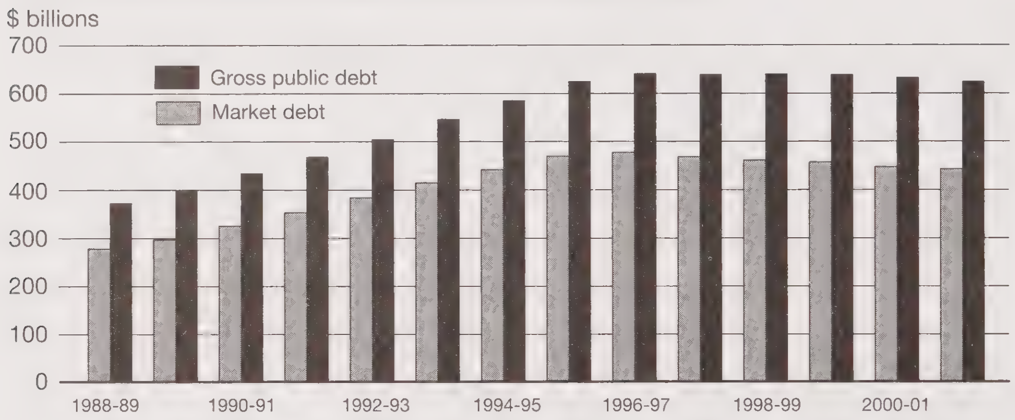
Gross, net and market debt have all declined in recent years.

Gross public debt is made up of two major components: market debt and non-market debt. Gross public debt at the end of March 2001 totalled $624.1 billion, down $8.8 billion from the previous year and $16.6 billion from a peak of $640.7 billion on March 31, 1997 (see Chart 2).

Market Debt

Market debt is the portion of debt that is funded in the credit markets and is, for the most part, actively managed by the Government. It consists of marketable bonds, Treasury bills, Canada Savings Bonds, Canada Premium Bonds, foreign-currency-denominated bonds and bills, and bonds held by the Canada Pension Plan. At March 31, 2002, market debt outstanding was $442.3 billion, down $4.1 billion from the previous year (see Chart 2).

Chart 2
Evolution of Gross Public Debt and Market Debt



Source: *Public Accounts of Canada.*

Non-Market Debt

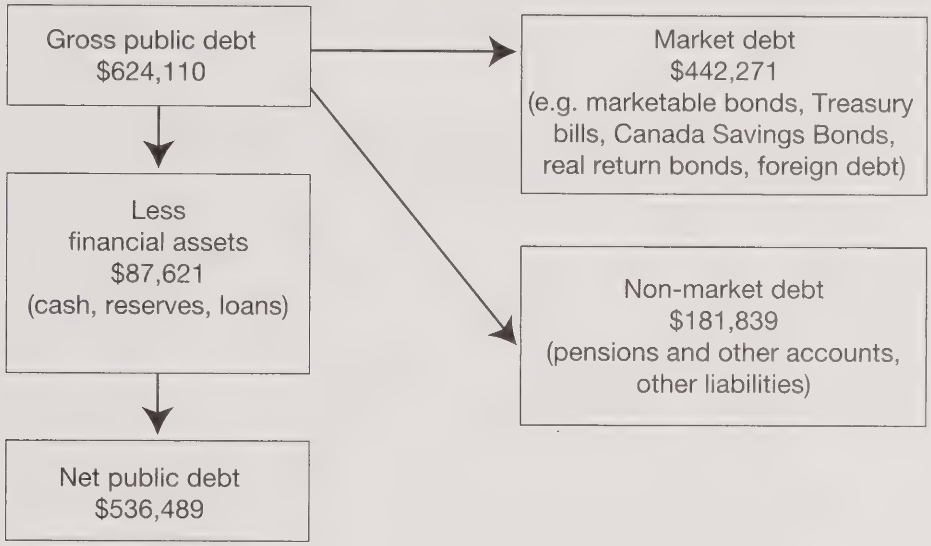
Non-market debt includes liabilities held by the Government outside the credit markets. This includes money owed to public sector pensions, the Canada Pension Plan and other accounts, and the Government's current liabilities and allowances. In 2001-02 non-market debt totalled $181.8 billion, down $4.7 billion from 2000-01.

Net Public Debt

Net public debt is gross public debt minus financial assets. Financial assets include cash, foreign exchange accounts and loans. Net public debt declined by $8.9 billion, from $545.4 billion in 2000-01 to $536.5 billion in 2001-02. The Government's financial assets increased by $0.1 billion to $87.6 billion, as the decrease in the Government's cash balances and accounts receivable was more than offset by increases in foreign exchange reserves and loans, investments and advances.

The net public debt-to-GDP ratio dropped to 49.1 per cent in 2001-02, its lowest level in 17 years and down from a peak of 70.9 per cent in 1995-96.

Figure 1 – Total Public Debt as at March 31, 2002
($ millions)



Source: *Public Accounts of Canada.*

Market Developments

After a sharp but temporary downturn in the first half of fiscal year 2001-02, the Canadian economy rebounded strongly in the second half of the year. Core inflation remained within the 1 to 3 per cent target range throughout this period. The Canadian dollar traded between about US63 cents to US66 cents. During the latter half of the fiscal year, the US dollar appreciated against most international currencies, benefiting from substantial safe-haven flows.

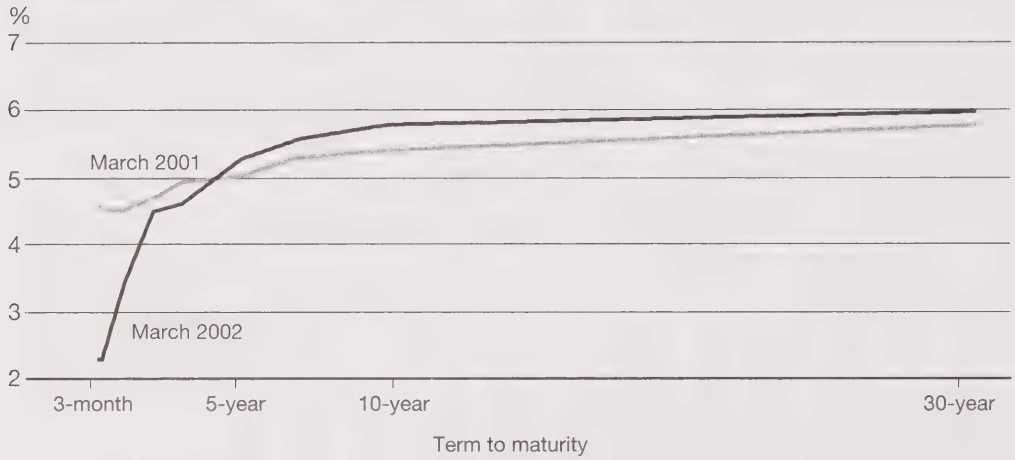
Short-term interest rates declined, reflecting the global economic slowdown.

Short-term interest rates trended downward from the start to the end of the fiscal year in response to the global economic slowdown that became more evident as the year progressed, with a sharper drop coming in the wake of September 11. The Bank of Canada's target rate for overnight loans fell from 5 per cent to 2 per cent over the first three quarters, where it remained for the rest of the year. These developments were consistent with those in the US.

The yield curve steepened as the year progressed.

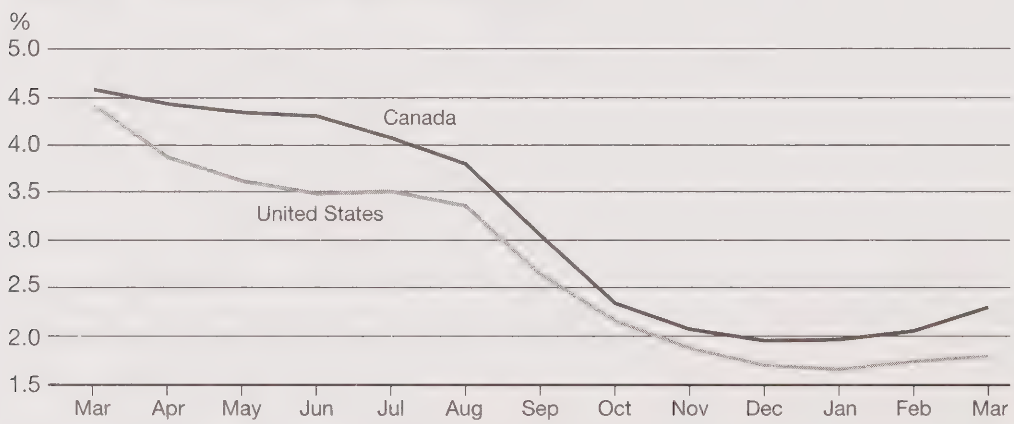
Short-term interest rates were noticeably lower than long-term interest rates (i.e. the yield curve was positively sloped) in both Canada and the US during 2001-02, reflecting the substantial amount of monetary stimulus in the economy. From the end of December to the end of the fiscal year, the yield curve steepened as market expectations adapted to a tightening monetary policy and higher long-term interest rates (see Charts 3, 4, 5 and 6).

Chart 3
Canada Yield Curve, March 2001 and March 2002



Source: Bank of Canada.

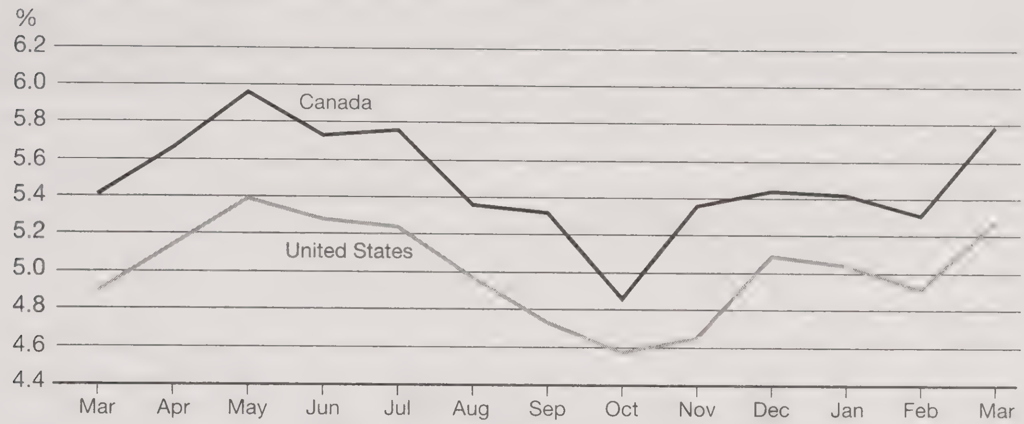
Chart 4
3-Month Treasury Bill Rates, 2001-02



Sources: Bank of Canada and Federal Reserve Board.

Chart 5

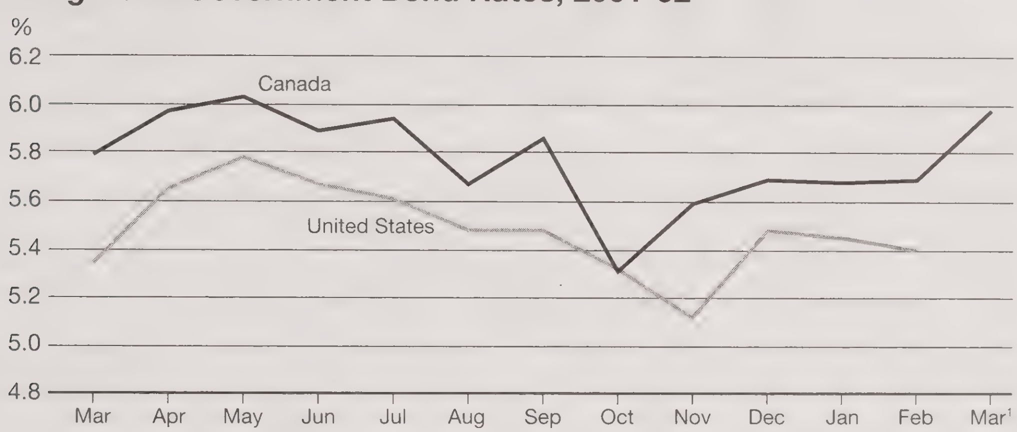
10-Year Government Bond Rates, 2001-02



Sources: Bank of Canada and Federal Reserve Board.

Chart 6

Long-Term Government Bond Rates, 2001-02



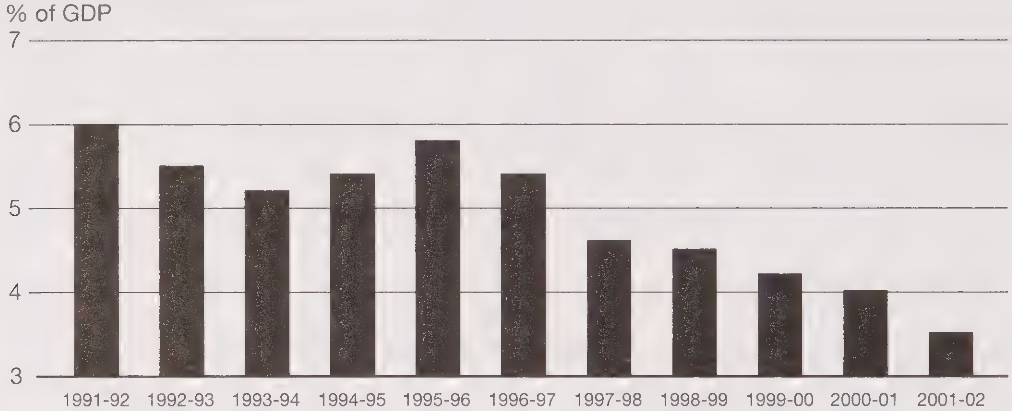
[1]The US Treasury no longer issues 30-year bonds.
Sources: Bank of Canada and Federal Reserve Board.

Public Debt Costs

Public debt charges continue to fall relative to GDP.

The Government spent about 22 cents of every dollar of revenue in 2001-02 to pay the interest on the public debt, down from a peak of 36 cents in 1995-96; it is now at the same level as in 1980-81. Public debt charges as a percentage of GDP declined to 3.5 per cent in 2001-02 from 4.0 per cent in 2000-01 (see Chart 7).

Chart 7
Public Debt Charges



Source: *Public Accounts of Canada*.

2001-2002 Debt Management Initiatives

Plan as set out in 2001-2002 *Debt Management Strategy*	Results for fiscal year 2001-2002
Debt Structure	
Maintain target of having two-thirds of the Government's total interest-bearing debt in fixed-rate form.	The fixed/floating ratio was maintained at the target level of two-thirds.
Domestic Debt Programs	
Planned initiatives in 2001-02 to enhance cost-effectiveness and maintain a well-functioning market in Canadian-dollar-denominated securities:	
• Keep bond and Treasury bill programs at levels similar to previous year.	• The bond and Treasury bill programs were kept at levels similar to the previous fiscal year.
• Increase the benchmark bond target range sizes for 10- and 30-year bonds from \$9 billion-\$12 billion to \$12 billion-\$15 billion, respectively, to enhance liquidity.	• The benchmark sizes were increased as per the plan.
• Reduce the targeted turnaround time for publication of the results for Government of Canada securities auctions from 30 minutes to 15 minutes to reduce market risk for participants and encourage broader participation.	• The auction turnaround time was reduced to 15 minutes in May 2001.
• Facilitate cash management by changing the 30-year benchmark issuance pattern from spring/fall to summer/winter to match the issuance cycle to cash flow needs.	• The 30-year cycle change was implemented.
• Continue the pilot cash management bond buyback program to reduce the peak levels of government cash balances and reduce variability in Treasury bill auctions.	• The pilot cash management buyback program was continued.
• Develop a new collateral-based framework for management of cash balances to reduce risk and broaden access.	• The new collateral-based framework was developed during the fiscal year and subsequently implemented in September 2002.

2001-2002 Debt Management Initiatives (cont'd)

Domestic Debt Programs (cont'd)

As a result of ongoing consultations with market participants, several other initiatives were undertaken to supplement those set out in the 2001-02 *Debt Management Strategy*:

- The time of regular Government of Canada bond buyback operations was changed from 2:00 p.m. to 1:15 p.m. to reduce market risk for participants and encourage broader participation.
- The range of eligible bonds for the bond buyback program was expanded to support the maintenance of a liquid new bond issue market.
- To stimulate participation of existing participants in buyback operations, the first pilot buyback operations on a switch basis occurred in February 2002.
- The pilot cash management bond buyback floor was lowered from $6 billion to $4 billion to enhance the effectiveness of the program.

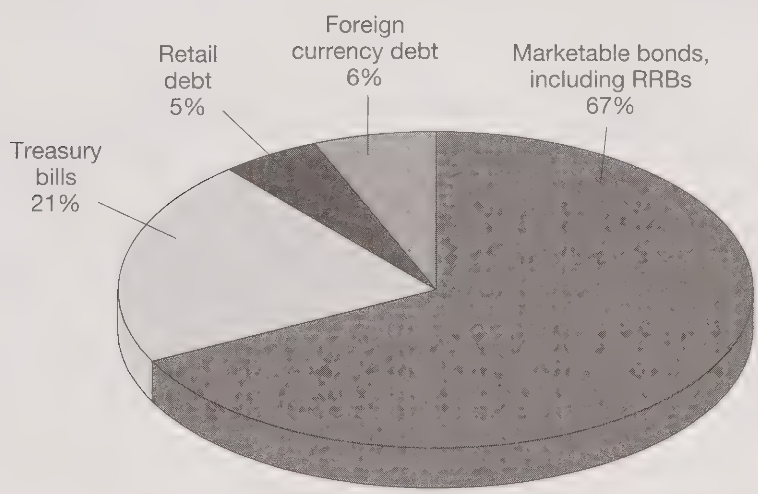
Plan as set out in 2001-2002 *Debt Management Strategy*	Results for fiscal year 2001-2002
Foreign Debt Programs	
With respect to the management of the Government's foreign debt and assets, the following plan was set out for 2001-02:	
• Continue cross-currency swaps in order to provide cost-effective funding.	• The federal government entered into 79 cross-currency swaps worth US $4.1 billion during the year.
• Further reduce excess foreign liabilities over foreign assets.	• Excess liabilities were reduced by $0.2 billion and are on track to be eliminated in the near term.
• Complete the implementation of a new comprehensive collateral management framework to better manage the Government's risk to financial institution counterparties associated with its cross-currency swaps, forward contracts and deposits with financial institutions.	• Counterparties signed a new collateral framework contract in April 2001, with implementation ongoing.

Report on 2001-2002 Borrowing Programs

Market debt declined from $446.4 billion to $442.3 billion in 2001-02.

As of March 31, 2002, market debt outstanding comprised $277 billion in fixed-coupon marketable bonds, $16.8 billion in real return bonds (RRBs),[2] $94 billion in Treasury bills, $24 billion in retail debt (Canada Savings Bonds and Canada Premium Bonds), $3.4 billion in Canada Pension Plan (CPP) bonds and $27 billion in foreign-currency-denominated securities (see Table 1). Foreign currency debt and swaps are used for the purpose of funding the Government's international reserves portfolio. The Government had $2 billion in interest rate swaps and $29.9 billion in cross-currency swaps outstanding as of March 31, 2002. Taking into account the effect of cross-currency swaps, foreign currency obligations were 12.9 per cent of market debt.

Chart 8
Composition of Market Debt
March 31, 2002



Note: Excluding bonds issued to the CPP and swaps.
Numbers do not add to 100% due to rounding.

This section provides details on the operations of each major debt program. In 2001-02 the stock of Treasury bills increased by $5.3 billion, which was largely offset by a $2.9-billion decrease in fixed-coupon marketable bonds and a $2.1-billion decrease in retail debt. Issuance levels were in accordance with levels set out in the *Debt Management Strategy* at the beginning of the fiscal year. For information on the federal debt management framework, see Annex 1. For descriptions of the individual programs, see Annex 2.

[2] Includes consumer price index (CPI) adjustment.

Table 1
Composition of Federal Market Debt, 2001-02

	April 1, 2001 Outstanding	New issues	Maturing	Repurchase	March 31, 2002 Outstanding	Change
			($ billions)			
C$-denominated						
Fixed-coupon marketable bonds	279.9	40.2	26.0	17.1[d]	277.0	-2.9
Real return bonds[a]	15.1	1.7	–	–	16.8	1.7
Treasury bills[b]	88.7	197.0	191.7		94.0	5.3
Retail debt	26.1	2.4	4.5	–	24.0	-2.1
Total domestic debt	409.8				411.8	2.0
Foreign-currency-denominated						
Canada Bills	7.2	23.2	27.1	–	3.4	-3.9
Foreign bonds[c]	20.7	0.2	1.6	–	19.3	-1.4
Canada Notes	1.6	–	0.4	–	1.2	-0.4
Euro Medium-Term Notes	3.7	0.0	0.5	–	3.2	-0.5
Total foreign debt	33.2				27.0	-6.1
CPP bonds and notes	3.5	–	0.1	–	3.4	-0.1
Total market debt	446.4				442.3	-4.1

Note: As at March 31, 2002, the total amount of interest rate and cross-currency swaps outstanding stood at $31.9 billion (see Reference Table XI). Cross-currency swaps convert C$-denominated government debt into foreign currency obligations for the purpose of funding the international reserves portfolio.

Numbers may not add due to rounding.

[a] Includes CPI adjustment.

[b] These securities are issued at a 3-, 6- and 12-month maturities and are therefore rolled over a number of times during the year for refinancing. This results in a larger number of new issues per year than stock outstanding at the end of the fiscal year.

[c] Includes $492.0 million in securities assumed by the Government of Canada on February 5, 2001, on the dissolution of Petro-Canada Limited.

[d] Includes the bond buyback program, the pilot cash management bond buyback program and the pilot switch program.

Source: *Public Accounts of Canada.*

Domestic Debt

Fixed-Coupon Marketable Bonds and Bond Buybacks

Gross bond issuance totalled $40.2 billion.

Fixed-coupon marketable bonds are issued at 2-, 5-, 10- and 30-year maturities on a quarterly basis, with the exception of 30-year bonds, which are issued semi-annually. The Bank of Canada announces the quarterly auction calendar shortly before the start of each quarter. These bonds are non-callable and pay semi-annual coupon payments. In 2001-02 gross issuance of bonds totalled $40.2 billion, consisting of $14 billion in 2-year bonds, $10 billion in 5-year bonds, $9.9 billion in 10-year bonds and $6 billion in 30-year bonds. During the year $26 billion worth of bonds matured.

There are three types of bond buybacks: buybacks on a cash basis, buybacks on a switch basis, and cash management buybacks.

The Government of Canada carries out three types of buybacks of its bonds. Bond buybacks on a cash basis, in which bonds are bought from investors for cash, take place following nominal bond auctions. Buybacks on a switch basis, in which the currently offered bond is exchanged for older bonds, take place several times each quarter. The first buyback on a switch basis took place in February 2002. Both of these types of buybacks have the objective of maintaining a liquid new-issue program by buying back older, less liquid bonds. Cash management buybacks of bonds, which involve buying back bonds with less than 12 months to maturity, are used to smooth the Government's cash requirements by reducing the peak levels of government cash balances needed to redeem upcoming benchmark bond maturities and to reduce the variability in the Treasury bill program. Bond buybacks on a cash basis totalled $5.3 billion, buybacks carried out on a switch basis totalled $0.4 billion and cash management bond buybacks totalled $11.5 billion.

Net new issuance declined by $2.9 billion.

Net new issuance of fixed-coupon marketable bonds during the year, taking into account buybacks and maturities, declined by $2.9 billion (gross issuance less repurchases less maturing issues), bringing the stock of outstanding marketable bonds down to $277 billion as at March 31, 2002.

Real Return Bonds

$1.35 billion in RRBs were issued.

Government of Canada real return bonds (RRBs) are issued at the long-term maturity of around 30 years. In contrast to fixed-coupon marketable bonds, whose coupon payments are fixed, interest payments on RRBs are adjusted for changes in inflation. More specifically, RRBs pay a real yield on a principal amount that is indexed to the CPI.

2001-02 issuance of RRBs totalled $1.35 billion, increasing the level of outstanding RRBs from $13.5 billion to $14.8 billion (from $15.1 billion to $16.8 billion including the CPI adjustment) as at March 31, 2002 (see Reference Table X).

Treasury Bills

The stock of Treasury bills increased by $5.3 billion.

Treasury bills are auctioned every two weeks in 3-, 6- and 12-month maturities and pay out at maturity at par (face) value. The stock of outstanding Treasury bills increased by $5.3 billion during the 2001-02 fiscal year to $94 billion at March 31, 2002. In 2001-02 the Government issued $197 billion in new Treasury bills, up from $174.3 billion in 2000-01 (see Reference Table VI).

Cash management bills (CMBs) are issued periodically by the Government of Canada. CMBs are Treasury bills with maturities of less than 3 months (they can be as short as one day) used as a source of short-term financing for the Government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Retail Debt

The retail debt stock fell by $2.1 billion.

There are two types of non-marketable retail debt: Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs). CSBs and CPBs are sold for six consecutive months from October to March. Both types of bonds can be registered in the name of Canadian residents and are available in regular and compound interest forms. CSBs are cashable at any time and provide minimum guaranteed interest rates, which may be increased if market conditions warrant. CPBs are cashable once a year and offer a higher rate of interest for a longer period compared to the CSB on sale at the same time. CPBs' announced interest rates for the posted periods do not change once the issue date of the bonds has passed.

In 2001-02 the level of outstanding debt held by domestic retail investors – CSBs and CPBs – decreased from $26.1 billion to $24 billion. The decline in the retail debt portfolio reflects the reduction in federal government debt.

Foreign Debt[3]

Canada Bills

Canada Bills outstanding fell by US$2.5 billion.

Canada Bills are promissory notes which mature not more than 270 days from their issue. These securities are denominated in US dollars and are issued for foreign exchange reserve funding purposes only. In 2001-02 the level of outstanding Canada Bills decreased from $7.2 billion (US$4.6 billion) to $3.4 billion (US$2.1 billion), as the Government took steps to reduce the level of short-term foreign currency liabilities, in order to prudently manage rollover risks associated with maturing short-term liabilities.

Canada Notes

Canada Notes outstanding declined by US$200 million.

Canada Notes are promissory notes denominated in foreign currencies structured to meet investor demand. They are issued for foreign exchange reserve funding purposes only. The stock of outstanding Canada Notes decreased from $1.6 billion (US$1.0 billion) during 2001-02 to $1.2 billion (US$0.8 billion).

Euro Medium-Term Notes

EMTNs outstanding declined by US$300 million.

The Euro Medium-Term Note (EMTN) program complements the Canada Notes program. Notes issued under the program can be denominated in a range of foreign currencies. In 2001-02 there were no new EMTN transactions, and the total outstanding decreased from $3.7 billion (US$2.3 billion) to $3.2 billion (US$2.0 billion).

[3] All values are in Canadian dollars unless otherwise indicated.

Foreign-Currency-Denominated Bonds

US$1.0 billion in global bonds matured.

There was no new global bond issuance in 2001-02. A total of $1.6 billion (US$1.0 billion) of foreign currency bonds matured in 2001-02. The total outstanding was $19.3 billion (US$12.1 billion).

Cross-Currency Swaps

US$4.1 billion was raised by 79 cross-currency swaps.

Cross-currency swaps consist of the exchange of obligations denominated in Canadian dollars for obligations denominated in foreign currencies, typically US dollars or euros, with the proceeds used to fund Canada's international reserves. Cross-currency swaps of domestic obligations are generally highly cost-effective compared to other sources of foreign currency funds. At the beginning of a cross-currency swap, the Government of Canada receives a principal amount in a foreign currency from the counterparty in exchange for a Canadian-dollar principal payment sourced from domestic bond issues. During the life of the swap, interest payments are made on the principal amounts. At the end of the swap contract the Government repays the foreign currency principal amount and receives the Canadian-dollar principal payment. In 2001-02 the federal government raised $6.4 billion (US$4.1 billion) by entering into 79 cross-currency swaps. At the end of the 2001-02 fiscal year, the total outstanding amount of cross-currency swaps totalled $29.9 billion (US$18.8 billion) (see Reference Table XI).

Report on 2001-2002 Initiatives

Raising stable and low-cost funding is the primary objective.

The fundamental debt management objective is to raise stable, low-cost funding for the Government. A key strategic objective is to maintain a well-functioning market for Government of Canada securities. A well-functioning market contributes to keeping costs low and benefits financial markets in general. (The 2001-02 *Debt Management Strategy* outlined the debt management plan for 2001-02 and is available on the Department of Finance Web site at www.fin.gc.ca).

The following sections report on the Government's initiatives designed to address these strategic goals. The section entitled "Maintaining a Well-Functioning Market" details the initiatives taken to maintain a well-functioning market in Government of Canada securities. The section entitled "Maintaining a Prudent Debt Structure" reports on the key measures and analysis used in determining the target debt

Federal Debt Management Strategy *Summary*

Fundamental Objective

- Raise stable, low-cost funding for the Government.

Strategic Objectives

- Maintain a prudent debt structure.
- Maintain and enhance a well-functioning market for Government of Canada securities.
- Maintain a diversified investor base.

Operational Principles

- **Prudence:** The Government manages the composition of the debt to help protect its fiscal position from unexpected increases in interest rates and to limit refinancing needs. The Government raises all the required funding for its operational needs in the domestic market. Funds raised using foreign currency debt and swaps are used to fund the Government's international reserves portfolio. Currency and interest rate risks arising in the management of the Government's foreign reserves portfolio are immunized by matching the currency and duration of assets and liabilities.
- **Transparency, liquidity and regularity:** The Government places emphasis on transparency, liquidity and regularity in the design and implementation of its debt programs in order to maintain a well-functioning domestic market.
- **Diversification:** The Government uses a range of financial sources and borrowing terms to tap investor demand and maintain a diversified investor base.
- **Market integrity:** The Government works with market participants and regulators to maintain the integrity and attractiveness to investors of the Government of Canada securities market.
- **Consultations:** The Government actively seeks input from market participants on major adjustments to the federal debt and cash management programs.
- **Best practices:** The Government seeks to ensure that its operational framework and practices are in line with the best practices of other comparable sovereign borrowers and the private sector.

For more information on the general framework within which the federal debt is managed, see Annex 1.

structure. "Maintaining a Diversified Investor Base" reports on developments regarding the investor base for Government of Canada bonds, including domestic and non-resident holdings. And the section entitled "Foreign Debt and Reserves Management Strategy" reports on the management of foreign debt and assets.

Maintaining a Well-Functioning Market

The Government's operating principles are transparency, liquidity and regularity.

A well-functioning Government of Canada securities market helps to ensure low-cost financing for the federal government over time by providing products demanded by investors in an efficient manner, thereby attracting broad participation in the market. The Government's operating principles of transparency, liquidity and regularity are operationalized by borrowing and repurchasing securities in the domestic market on a regular, pre-announced basis in key segments of the market, building regular large bond benchmarks and maintaining transparent rules for participation at Government of Canada securities auctions.

The Government works closely with market participants on issues of market function and integrity.

Federal government securities play a key role in Canada's fixed-income market by providing the benchmark against which other instruments are priced, hedged and traded. The Government monitors auction results, secondary market turnover and transaction costs in the Government of Canada securities market as indicators of liquidity and market efficiency. It also works closely with market participants to address issues of market function and integrity. Market participants are consulted on the Government's debt strategy and adjustments to its domestic debt programs on a semi-annual basis through notices posted on the Bank of Canada's Web site. Through this approach, the Government seeks to maintain a high standard of transparency, improve the attractiveness of the market for investors, and take into account market views in decisions on debt management operations.

In recent years the Government has made a number of adjustments to its operations to enhance the liquidity of the market, such as moving to a semi-annual issuance pattern for the 30-year benchmark, increasing benchmark bond target sizes and expanding the use of bond buybacks.

Secondary bond market activity increased in 2001-02.

In 2001-02 annual Government of Canada bond turnover increased to 12.8 times the outstanding stock from 11.7[4] times in 2000-01. The level of trading activity globally increased in 2001-02, with Canada's bond market remaining one of the most active sovereign bond markets in the world based on indicators of the liquidity of the market. These include the volume of transactions and turnover ratios comparable to other similar sovereign issuers, with the exception of the US (see Charts 9 to 13).

Initiatives taken in 2001-02 are discussed in the following sections.

[4] Revised from 11.5 stated in last year's *Debt Management Report*.

Bond Program Initiatives

Benchmark Size

Benchmark target sizes were increased in the 10- and 30-year bonds.

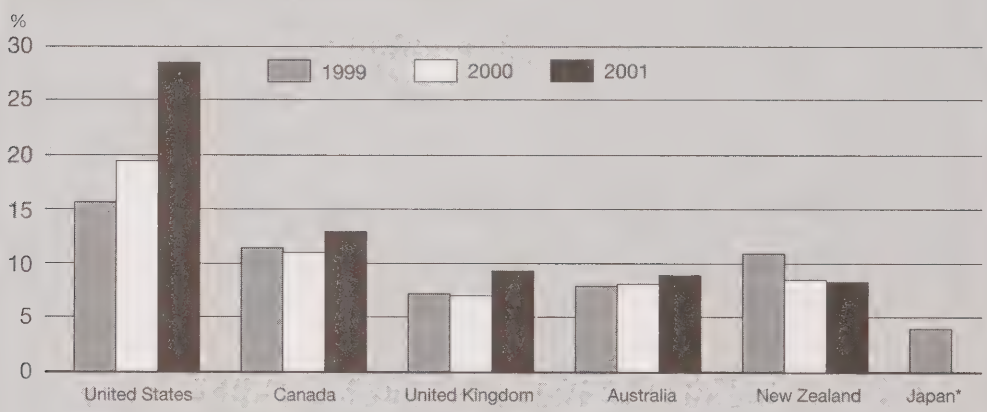
In consultations held in the formulation of the 2001-02 debt strategy, market participants indicated that the Government of Canada securities market was functioning well, but that liquidity had declined over the previous year. In general, participants indicated a preference for maintaining the current structure of the bond program but increasing liquidity through larger benchmark bond target sizes, particularly at the long end of the yield curve. Therefore, in its 2001-02 debt strategy, the Government increased the benchmark target ranges for 10- and 30-year bonds from $9 billion-$12 billion to $12 billion-$15 billion.

Government of Canada Securities Statistics

Comparison With Other Countries

The Government of Canada bond market compares favourably with other major sovereign bond markets. The market had an annual stock turnover level in 2001 of 12.9, behind only the United States, which had a stock turnover level of 28.5.

Chart 9
Sovereign Bond Turnover Ratios



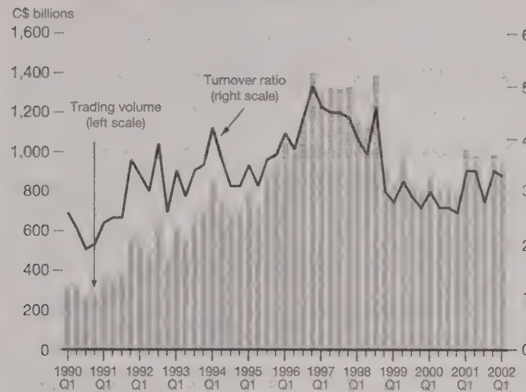
Note: Turnover ratio is total trading volume in each year/stock.
* Data for Japan unavailable for 2000 and 2001.
Source: Bank of Canada.

Market Activity

The volume of transactions in the Government of Canada bond market has grown significantly since 1990. Total marketable bond trading volume was $3,736.7 billion in 2001-02, a 9.1-per-cent increase from 2000-01. The annual turnover ratio was 12.8 times the outstanding stock of bonds in 2001-02, compared to 11.7 in 2000-01 (see Chart 10). The volume of transactions in the Treasury bill market remained at the low levels seen in recent years, as the stock of Treasury bills outstanding has fallen. In 2001-02 total Treasury bill turnover was $1,007.0 billion. The annual turnover ratio was 11.28 times the outstanding Treasury bill stock (see Chart 11).

Chart 10

Government of Canada Bonds Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 11

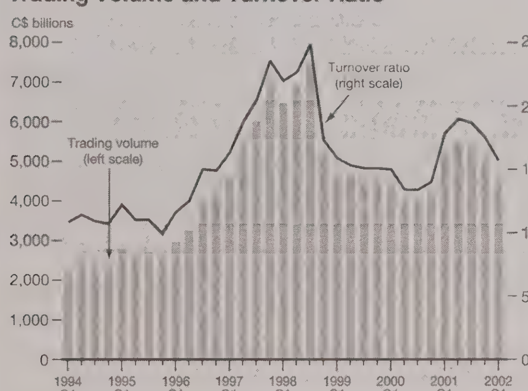
Government of Canada Treasury Bills Trading Volume and Turnover Ratio

Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

An active repo market is a hallmark of a well-functioning government securities market. The total turnover for Government of Canada bond repos in 2001-02 increased to $20,536 billion from $17,511 billion in 2000-01. Furthermore, the annual turnover ratio for bond repos in 2001-02 was 70.9 times (see Chart 12). The Treasury bill repo market volume in 2001-02 was $1,125.6 billion and the annual turnover ratio was 12.4 (see Chart 13).

Chart 12

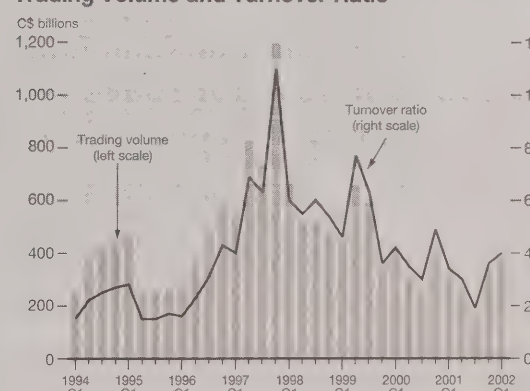
Government of Canada Bond Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 13

Government of Canada Treasury Bill Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Futures contracts are important complements to an efficient Government of Canada securities market. In Canada the trading volume of futures contracts maintained the levels of previous years. There is a futures contract based on benchmark 5- and 10-year Government of Canada bonds (the CGF and CGB contracts). Open interest of the futures contract on 10-year Government of Canada bonds increased to 64,310 in 2001, a 31.7-per-cent increase from 2000. The CGB contract continues to be actively traded, setting a new daily trading volume record on August 28, 2001, with 55,934 contracts traded, surpassing the year-old record of 50,880 set in 2000. There is also an active market for the 3-month Canadian Bankers' Acceptance Futures (BAX contracts).

Turnaround Times

Target turnaround time for auctions has been reduced to 15 minutes.

To reduce market participant risk during auctions, the targeted turnaround time for publication of the results for Government of Canada securities auctions was reduced from 30 minutes to 15 minutes starting May 22, 2001. The reduction in the turnaround time was the result of process and efficiency improvements. The 15-minute turnaround time compares favourably to most sovereigns with developed bond markets.

Bond Buyback Program

The bond buyback program contributes to maintaining the size of new issues.

To enhance liquidity in the primary market for Government of Canada securities, bond buyback operations on a cash basis were introduced on a trial basis in 1998-99. Based on favourable performance and market reaction, the program was implemented on an ongoing basis in 2000-01 and now plays an important role in the maintenance of a full new issue bond program.

Table 2
Bond Buyback Program

Amount repurchased	1998-99	1999-00	2000-01	2001-02
		($ millions)		
Buybacks on a cash basis	1,000	3,263	2,832	5,258
Buybacks on a switch basis	–	–	–	387
Total bond buyback program	1,000	3,263	2,832	5,645

In 2001-02 the size of bond buyback operations on a cash basis were increased.

Based on market feedback received during the 2001-02 debt strategy consultations, the size of bond buyback operations on a cash basis and the number of transactions were increased. Later, during the summer 2001 market consultations, market participants indicated that reducing the time between the release of auction results and the deadline for submission of tenders at buyback operations on a cash basis would reduce risk and provide an incentive for increased participation. Therefore, the submission deadline for bond buybacks on a cash basis was advanced from 2:00 p.m. to 1:15 p.m. starting October 2001.

The bond buyback program began including a broader range of bonds, and the frequency of operations increased.

The bond buyback program was further expanded to include bonds with maturities across a broader range of the yield curve in order to encourage the participation of a wider range of market participants.

To enhance market transparency and participation, the Government increased the frequency of bond buyback operations and announced the total target repurchase volume for each quarter in the quarterly bond auction schedule published by the Bank of Canada.

The Government introduced switch buyback operations on a trial basis late in the year.

In February 2002, on a trial basis, the Government started bond buyback operations on a switch basis to stimulate participation of existing securities holders in buyback operations. In the case of a buyback on a switch basis, less liquid bonds are exchanged for the new bonds in the benchmark being built on a duration-neutral basis, assuring minimal impact on bondholders' portfolio structure. The first pilot switch operation was successfully conducted in the fourth quarter of 2001-02 in the 30-year sector for an amount of $400 million.

Bonds are bought back when their value is consistent with the fair value model used by the Government of Canada.

The repurchase program has enabled the Government to conduct larger auctions during the last four years than would have been the case in the absence of a buyback program (see Table 2). During consultations with market participants, it was noted that an additional benefit of the program was improved secondary market liquidity, as trading increased in less liquid bonds targeted for repurchases under the program.

30-Year Issuance Timing

The 30-year issuance cycle was changed for cash management purposes.

In 2001-02 the Government changed the semi-annual issuance pattern for 30-year bonds from spring/fall to summer/winter to facilitate cash management. By altering the issuance pattern of the 30-year bonds, the Government is better able to match the issuance cycle to its cash flow needs. This was achieved by adding a third 30-year issue in the fourth quarter of fiscal year 2001-02. The one-time issuance was substantially offset by larger buybacks of outstanding long-term bonds.

Pilot Cash Management Bond Buyback Program

The CMBB program has expanded the Government's tools for cash management.

The Cash Management Bond Buyback (CMBB) program, introduced on a pilot basis in early 2001, was implemented to help manage the Government's cash requirements by reducing the high levels of government cash balances needed to redeem large bond maturities. In contrast to the buyback program aimed at supporting a full new issue bond program, the CMBB program involves buying back bonds with less than 12 months to maturity. By reducing the need to accumulate large cash balances, the CMBB program also smoothes out seasonal fluctuations in Treasury bill issuance.

The floor for maturities eligible for CMBB operations was lowered to $4 billion.

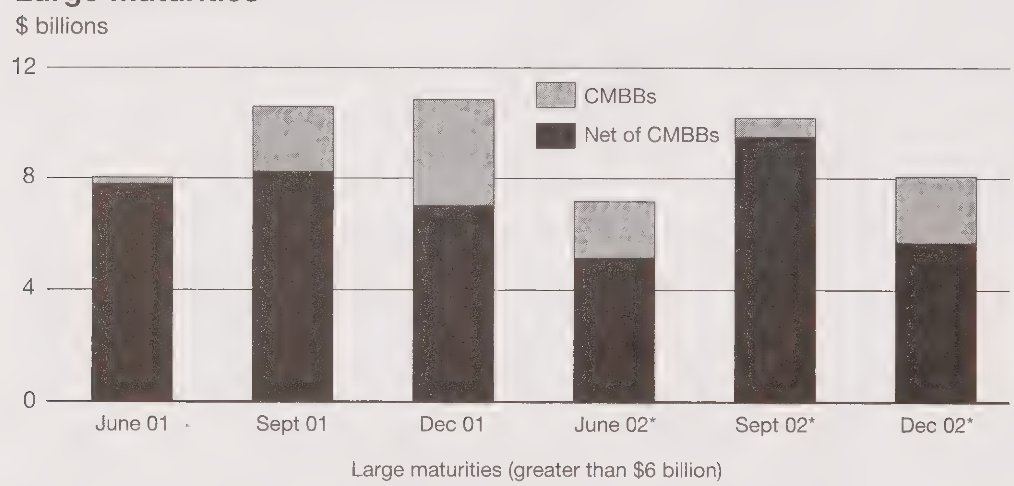
Following market consultations the Government announced in October 2001 that the floor that limits the total amount the Government can repurchase from bonds maturing on any given target date would be lowered from $6 billion to $4 billion. This was undertaken to enhance the operational effectiveness of the CMBB program.

Table 3
Pilot Cash Management Bond Buyback Program

	2000-01	2001-02
	($ millions)	
Amount repurchased	2,500	11,484

The first cash management buyback of $500 million was held on January 16, 2001. Following this, $2 billion worth of bonds were repurchased in February and March, for a total of $2.5 billion during the 2000-01 fiscal year. In 2001-02 almost $11.5 billion worth of bonds were repurchased, with a significant positive impact on large maturities outstanding (see Chart 14). The December 2001 maturity was the first maturity targeted for a full year, and $3.8 billion worth of bonds were repurchased of that maturity, reducing the level of the issue outstanding by 35 per cent.

Chart 14
Impact of 2001-02 CMBBs on the Government of Canada's Large Maturities



* These maturities were further reduced with operations held after the 2001-02 fiscal year.

The Government announced the continuation of the CMBB program.

After one year of operation the program was judged to be effective in meeting its operational targets and as a result, in its 2002-03 debt strategy, the Government announced the continuation of the pilot CMBB program.

To enhance transparency and participation, the frequency of CMBB operations was increased and the practice of announcing a target volume for each operation a week before on the Bank of Canada Web site was initiated.

Treasury Bill Program

The Treasury bill market continues to function effectively.

Following a significant decline in the stock of Treasury bills during the 1995-98 period ($166 billion to $112 billion), Treasury bill issuance has been maintained in the range of $80 billion to $95 billion. The decline in the size of the program led to a decline in secondary market turnover (see Chart 11 for quarterly results). However, the Treasury bill market has continued to function effectively from the perspective of the Government and market participants.

In the spring of 1999, in the fall of 2000 and again in the summer of 2001, the Government asked market participants for their views on the need to restructure the program in light of the lower level of liquidity. The majority of market participants continued to indicate that they prefer to maintain the existing biweekly auctions of three Treasury bill tranches (3, 6 and 12 months). They also indicated that most dealers and investors have adjusted well to lower levels of stocks of Treasury bills outstanding. The general consensus was that, provided the stock remains in the range of $75 billion to $95 billion, no change was needed to the structure of the Treasury bill program.

Market Transparency and Electronic Trading

The Government has a strong interest in the development of electronic trading and trade reporting initiatives that would support the maintenance of a transparent, liquid and efficient domestic fixed-income market and enhance the attractiveness of the fixed-income market for a wide array of investors. In 1999 a screen-based, real-time information system (CanPx) was established by dealers and inter-dealer brokers. CanPx reports best bid and offer prices and trading volumes in a range of benchmark fixed-income securities. The CanPx system was expanded in 2001-02 and provides a trade reporting standard that is in line with the practices of comparable sovereign countries.

The Department of Finance and the Bank of Canada continue to actively contribute to discussions on the development of the regulatory framework for ATSs.

In 2001-02 plans for a number of private sector electronic trading systems were announced. On an ongoing basis during the year, the Department of Finance and the Bank of Canada contributed to discussions with Canadian securities regulators and market participants on the design and implementation of a regulatory framework for alternative trading systems (the ATS Rules). The ATS Rules came into force in late 2001.

Retail Debt

In 2001-02 the Government's retail debt program offered Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs) to retail investors during a six-month period from October 2001 to March 2002. The retail debt program is designed to meet the needs of individual Canadians and contribute to the diversification of the Government's investor base. Both instruments were offered through the cash market and payroll savings channels. CPBs continue to be the preferred instrument for investors buying on a cash basis from financial institutions. Payroll sales of CSBs continued to increase from previous years following the redesign of the program in 1997.

The retail debt program continues to evolve with the changing demands of Canadians.

Several initiatives were continued or undertaken to increase access and improve the distribution of retail products for the Government. The telephone direct sales pilot was extended for another year. To complement the direct telephone channel, a direct Internet sales channel was launched in October 2001, giving Canadians the option to purchase CSBs and CPBs on-line. The on-line payroll purchase option begun in the federal public service was expanded and met with favourable results. To lower cost and improve customer service, the Bank of Canada outsourced its back office systems and operations to EDS Canada Inc.

For further information on retail debt plans and operations, see the Canada Investment and Savings Web site at www.csb.gc.ca.

Maintaining a Prudent Debt Structure

The Government maintains a debt structure that balances prudence with continued access to lowest-cost sources of funds.

As previously noted, the Government's net debt and market debt have declined over the past five years. While the debt is on a downward trend, the stock of outstanding debt that is exposed to interest rate changes remains very large. Roughly one-quarter of the federal government's budgetary expenditures are debt-servicing charges, and sharp movements in interest rates have the potential to disrupt budgetary planning.

The Government's primary method of achieving its strategic objective of stable, low-cost funding is to maintain a debt structure that balances stability with continuing access to low-cost sources of funds. The debt structure is the mix of fixed-rate and floating-rate debt instruments that make up the debt stock. This section describes the analytical tools and considerations that the Government uses to determine its target prudent debt structure.

Balancing Cost and Risk

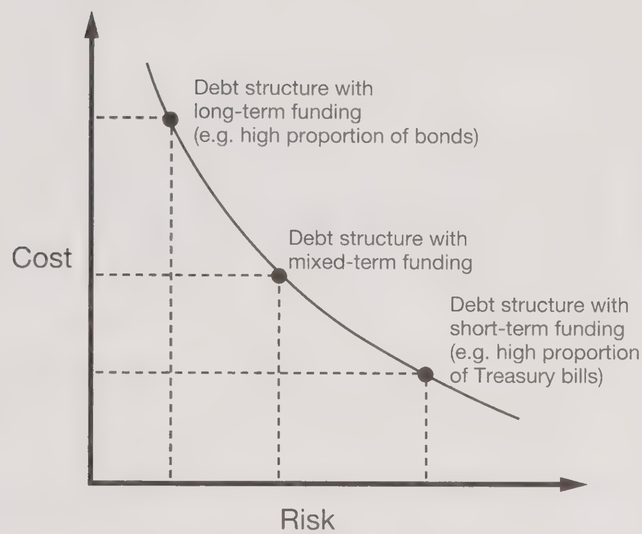
The Government considers a number of factors when determining the cost-risk trade-off of different debt structures.

In deciding on the appropriate debt structure, the Government must consider the trade-off between keeping borrowing costs low and ensuring that the cost impact of unexpected increases in interest rates does not exceed its tolerance for risk. Specifically, long-term maturity instruments such as Government of Canada bonds typically have higher debt-servicing costs (i.e. they pay higher coupon rates) than short-term instruments such as Treasury bills. On the other hand, the fixed-coupon rates of outstanding bonds are known with certainty for a longer period, and therefore result in lower interest rate risk compared to Treasury bills, which mature throughout the year and need to be refinanced at the then-prevailing market interest rates (see Chart 15). As interest rates change, short-term maturities move with current rates while long-term maturities have their rates locked in.

The Government takes a long-term strategic view in choosing a target debt structure in order to have reasonable and lasting cost stability under a range of potential interest rate environments.

Chart 15

Costs/Risk Trade-Off Depends on the Type and Amount of Government-Issued Securities That Make Up the Debt Structure



Assessing the Cost/Risk Trade-Off – Measures and Targets

The Government uses a number of tools to assess the cost/risk trade-off.

Debt managers gauge and describe the sensitivity of the debt structure to unexpected changes in interest rates in various ways.

- Measures such as the fixed-rate share of the debt, average term to maturity and duration characterize the composition of the debt and indicate how much of or how often the debt structure is exposed to interest rate variations.
- The distribution of the maturity profile of the debt indicates the proportion of debt that will be maturing and subject to refinancing risk.
- Another measure used to assess the debt structure's costs and risks with a forward-looking perspective is the simulation methodology called Cost at Risk (CaR). CaR quantifies directly the risk of incurring additional debt costs given a particular debt structure and assumptions of a wide range of potential interest rate movements.

These measures, consistent with the best practices of comparable sovereign borrowers, are used to depict the cost and risk of possible debt structures and guide decision making.

The fixed-rate share of debt is the main operational measure used in the past few years. Average term to maturity and maturity profile are two other measures that have been used to complement the fixed-rate share analysis. Duration provides an additional operational cost/risk measure. The range and sophistication of the CaR analysis is enhanced on an ongoing basis to better assess the fixed-rate debt structure. Table 4 provides a quick reference to the five measures.

Table 4
Cost/Risk Measures

Measure	It measures ...	It is used as a measure of ...
Fixed-rate share	... the portion of the debt issued at fixed interest rates (those over 12 months)	... the refinancing risk of the debt stock
Maturity profile	... the year-to-year distribution of maturing debt	... refinancing exposure over time
Average term to maturity	... the average time remaining before debt matures, taking into account principal repayments only	... how quickly changes in interest rates will affect debt costs
Duration	... the price sensitivity of the debt stock to interest rate movements	... how debt costs will be affected by changes in interest rates
Cost at Risk	... the potential debt cost impact resulting from interest rate exposure	... debt cost variability associated with a given debt structure

Fixed-Rate Share

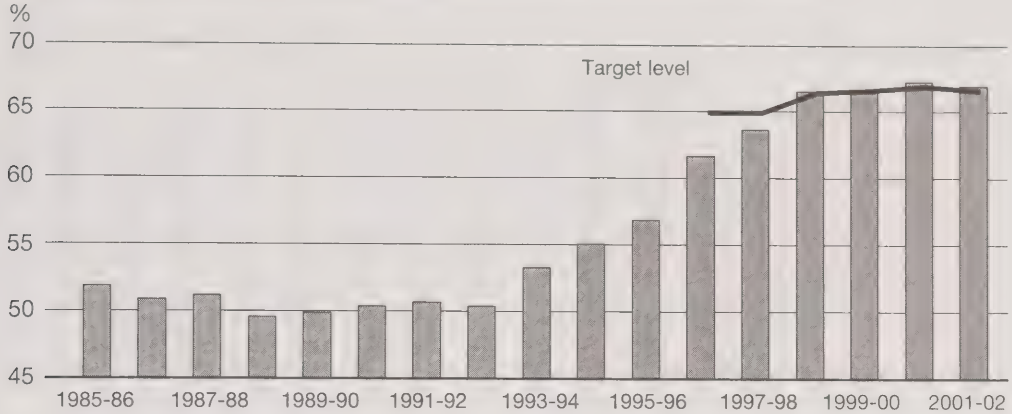
The fixed-rate share of the debt is computed as the proportion of interest-bearing debt having fixed rates – debt that does not mature or need to be re-priced within a year – relative to the total interest-bearing debt stock. The fixed-rate share is used by other central governments because it is an intuitive measure that is fairly easy to compute and understand.

The Government currently maintains a two-thirds fixed-rate share.

Debt-servicing costs increase (decrease) and financial risk decreases (increases) with a higher (lower) fixed-rate share. Following the sharp increase in interest rates in the late 1980s, the Government took measures to reduce the exposure of the debt stock to volatility in interest rates. The share of the debt stock at fixed rates increased from one-half in 1989-90 to two-thirds in 1998-99. For the past four fiscal years, the fixed-rate portion of debt has been managed around the two-thirds target (see Chart 16).

By establishing a more prudent fixed-rate debt structure, the Government has reduced the sensitivity of its annual debt-servicing costs to changes in interest rates. For example, the first-year impact on net debt-servicing costs of a 100-basis-point shock in interest rates in 2001-02 would have been $0.8 billion under the current structure, compared to $1.8 billion at the time of the 1995 budget.

Chart 16
Fixed-Rate Share of Interest-Bearing Debt at March 31



Source: Department of Finance.

However, the reduction of interest rate exposure from raising the fixed-rate share of the debt has a cost because fixed-rate debt generally carries higher interest rates than Treasury bills. The cost of maintaining a higher fixed-rate share varies substantially from year to year based on the term structure of interest rates. Compared to the fixed-rate structure in 1996-97, and given the average spread between short-term and long-term interest rates prevailing over the past five years, the relative cost of using a 67 per cent (two-thirds) target averages some $386 million over each of the past five years.

Maturity Profile

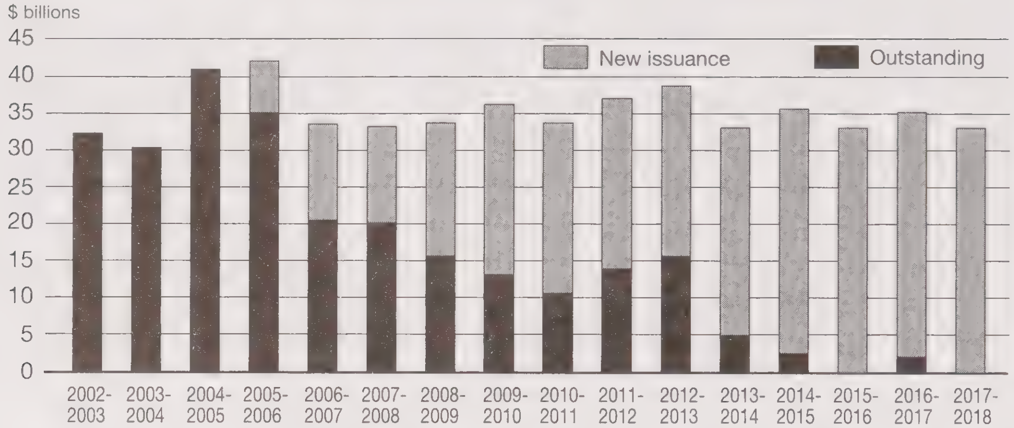
The maturity profile is managed to limit refinancing risk over time.

The Government also manages the maturity profile of the debt (i.e. the amount that matures, or comes due, in any given year) to limit its refinancing risk. A well-distributed maturity profile reduces the risk that a relatively large proportion of the debt will mature and need to be refinanced in a short period, when higher interest rates may prevail or markets may be disrupted.

The maturity profile of domestic government bonds is shown in Chart 17. The profile consists of a portion related to borrowing in previous years as at March 31, 2002, and assumes that the current issuance pattern is maintained. Initiatives to regularize bond refinancing into predictable benchmark securities have led to a gradual smoothing out of the maturity profile of the bond stock.

Treasury bills, unlike bonds, mature within a year of their issuance and are therefore excluded from the maturity profile depicted in Chart 17. The decline in the Treasury bill stock in the 1990s has lowered the Government's ongoing level of refinancing risk. For example, in 1995 the Government was required to refinance, on average, $8 billion per week in maturing Treasury bills, compared to an average of $7 billion every two weeks in 2001.

Chart 17
Maturity Profile of Domestic Bonds



Note: Excludes Treasury bills. Projections assume future issuance remains at 2001-02 levels and excludes buybacks.

Source: Department of Finance.

Average Term to Maturity

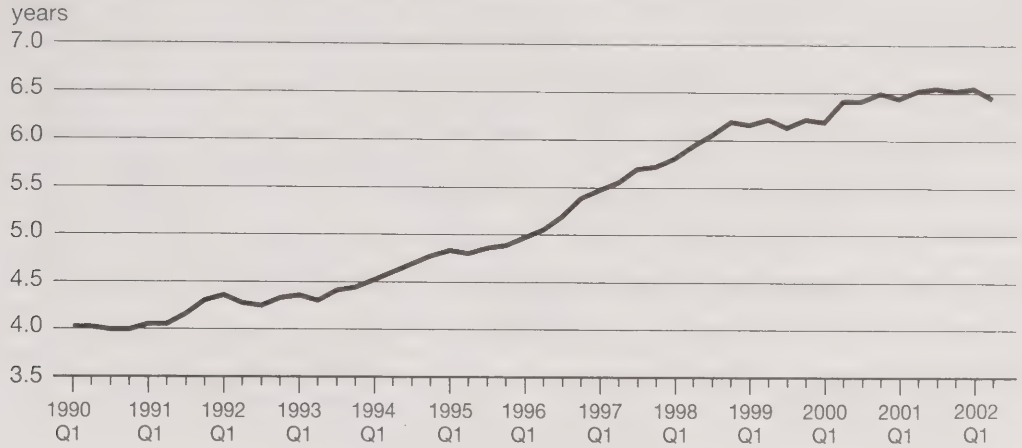
The ATM is used as an indicator of how quickly changes in interest rates will affect debt costs.

The average term to maturity (ATM) is the average lifespan of the marketable instruments that make up the debt and is a complementary measure to the fixed-rate share indicator. Retail debt is excluded since its average term is variable, due to its cashability. Measured in years, ATM represents the average length of time before debt instruments mature and become subject to refinancing risk. Longer ATMs mean that debt instruments are rolled over less frequently, which implies less uncertainty regarding future debt costs.

The ATM of marketable debt has increased from roughly 4 years in 1990 to 6.5 years in March 2002 (see Chart 18). These changes have brought the average term structure of Canada's debt more in line with the debt structures of the other G-7 countries.

Chart 18

Average Term to Maturity of Marketable Debt



Source: Bank of Canada.

Duration

Duration measures refinancing risks associated with coupon payments over the life of a bond.

Duration is another way of measuring refinancing risk. Similar to ATM, higher duration values reflect lower refinancing risk. Compared to ATM, duration is a more sophisticated way of measuring refinancing risk because, in addition to capturing the risk of refinancing principal amounts at maturity, it looks at the refinancing risk associated with coupon or interest payments that occur through the life of debt instruments. Since duration considers financial flows through the life of the debt instrument, the calculated duration will always be shorter than the ATM of the same structure. At the end of March 2002 the Government's marketable debt had a modified duration of 4.4 years, unchanged from last year.

Cost at Risk

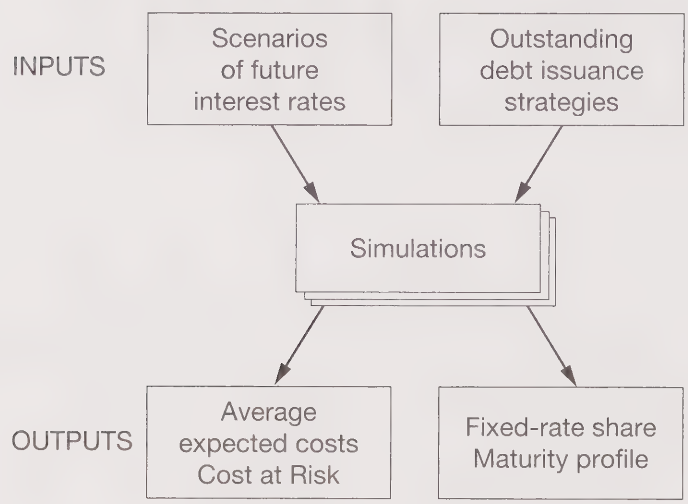
Cost at Risk measures the debt cost variability associated with different debt structures.

Cost at Risk (CaR) contributes to the Government's debt management decisions by quantifying risk directly in terms of potential debt cost and determining if it falls within the Government's tolerance level for risk. The measure is similar to the well-known Value at Risk measure used extensively throughout the financial community.

CaR analysis involves simulating future debt costs using a large number of possible interest rate scenarios. The analysis looks at various debt structures in order to better determine the relationship between debt structure, debt costs and risk.

The simulation framework for CaR analysis is depicted in Figure 2. First, a large number of interest rate scenarios are generated, based on a theoretical model from the economic literature,[5] to represent the full range of plausible developments in the interest rate term structure. The outstanding stock of debt is considered and several issuance strategies are examined. The simulation is then performed for each issuance strategy, under the set of interest rate scenarios, to generate a statistical distribution of possible debt costs and the projected cash flows. Statistical properties of the obtained distribution are examined and the average debt cost and CaR statistic are extracted.

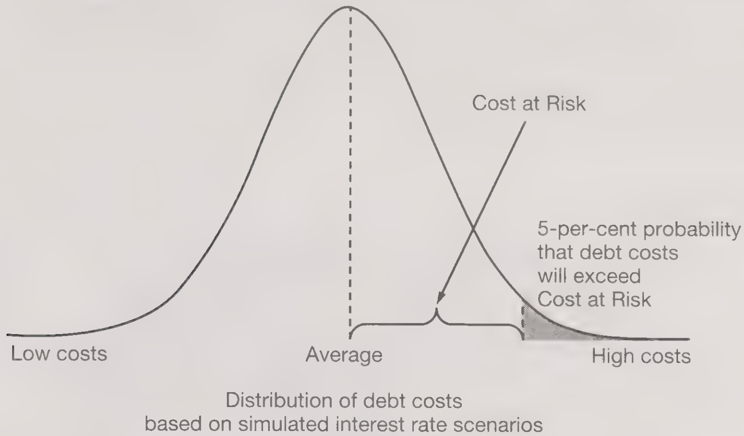
Figure 2 – Cost at Risk Analytical Framework



The statistical distribution for the debt costs has the general shape of the distribution in Figure 3. As a rule of thumb, scenarios with a large positive (negative) shock to interest rates lead to high (low) future debt costs. However, the central tendency is for most shocks to be small in nature. The debt structure is seen as prudent when there is only a small probability that an increase in interest rates causes debt costs to exceed an acceptable tolerance level. Using the results of the simulations, the plausible debt costs are used to determine the appropriate fixed-rate share target and maturity profile of the debt.

[5] The interest rate model used to generate the interest rate scenario for the CaR analysis is the two-factor Cox-Ingersoll-Ross model.

Figure 3 – Measuring the Risk of Future Debt Charges Using Cost at Risk



CaR indicates that, with a high probability, an interest rate shock will not disrupt the current fiscal framework.

It should be noted that unlike other measures such as fixed-rate share, ATM and duration, CaR is not an objective measure because it depends on several assumptions. In particular, experience has shown that results are very sensitive to the interest rate model employed. The Government is continuing to improve the CaR methodology. Results of the CaR analysis undertaken at the end of the 2001-02 fiscal year, based on upgraded assumptions and methodologies, indicate that with the two-thirds fixed-rate structure in place on March 31, 2002, there is a high probability that the impact of most interest rate shocks occurring in the budget horizon would not disrupt the Government's fiscal framework.

Maintaining a Diversified Investor Base

Diversified Investor Base

A diversified investor base is maintained to ensure active demand for Government of Canada securities, thereby reducing funding costs.

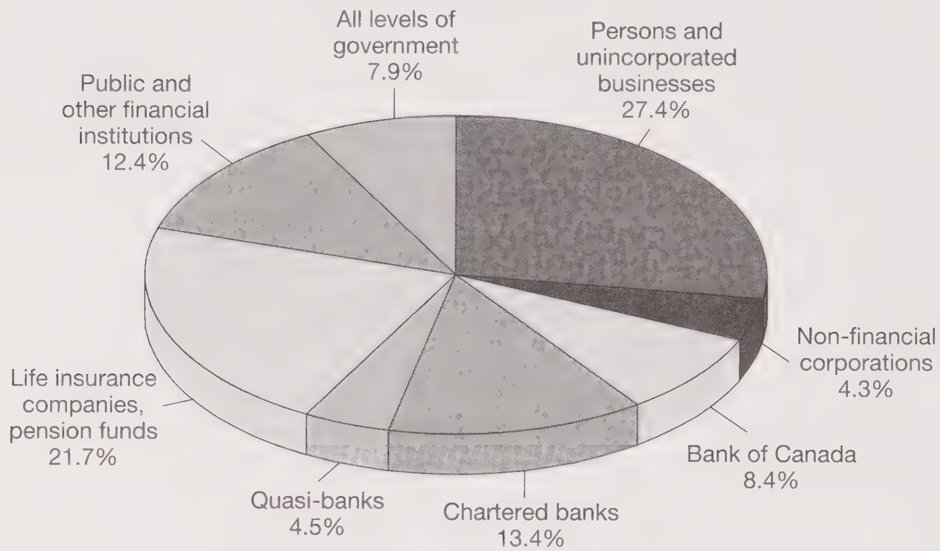
A diversified investor base helps to reduce funding costs by ensuring that there is active demand for Government of Canada securities. The federal government pursues diversification of its investor base by maintaining a domestic wholesale debt program that is attractive to a wide range of investors, offering a retail debt program that provides savings products designed to suit the needs of individual Canadians, and using a broad array of sources of funds in its foreign borrowings.

Domestic Holdings of Government of Canada Debt

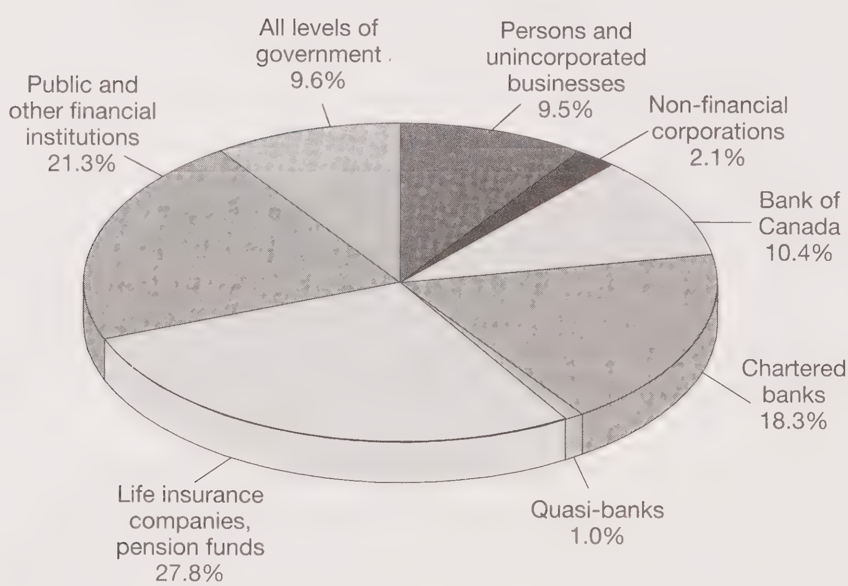
There was a significant shift in the distribution of holdings of Government of Canada market debt over the 1990s. Between 1991 and 2001 the holdings of life insurance companies and pension funds increased by over 70 per cent from $58 billion (21.7 per cent) to $100 billion (27.8 per cent), while the holdings of public and other financial institutions also increased sharply from 12.4 per cent to 21.3 per cent (see Chart 19). Chartered banks' share of holdings of market debt increased from 13.4 per cent to 18.3 per cent over the same period, while the share held by persons and unincorporated businesses decreased from 27.4 per cent to 9.5 per cent. The steep drop in holdings by this group is due mainly to the shift towards institutionalized investments in mutual funds.

Chart 19
Distribution of Domestic Holdings of Government of Canada Market Debt as of December 31

1991 – $266.7 billion



2001 – $358.4 billion



Source: Statistics Canada, *The National Balance Sheet Accounts*.

There was no major change in the distribution of holdings of government debt in the previous two years.

In 2001 life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (27.8 per cent), followed by public and other financial institutions such as investment dealers and mutual funds (21.3 per cent). Taken together, they accounted for over 49 per cent of domestic holdings.

Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

Foreign Debt and Reserves Management Strategy

Foreign debt is raised exclusively for the management of the Exchange Fund Account.

The Government of Canada borrows in foreign currencies exclusively to raise foreign exchange reserves for the Exchange Fund Account. The reserves in the Exchange Fund Account are maintained as a source of foreign currency liquidity and to promote orderly conditions in the foreign exchange market for the Canadian dollar. Further details on the management of international reserves are available in the *Exchange Fund Account Annual Report*, available on the Department of Finance Web site at www.fin.gc.ca.

The key objectives of Canada's reserve program are to:

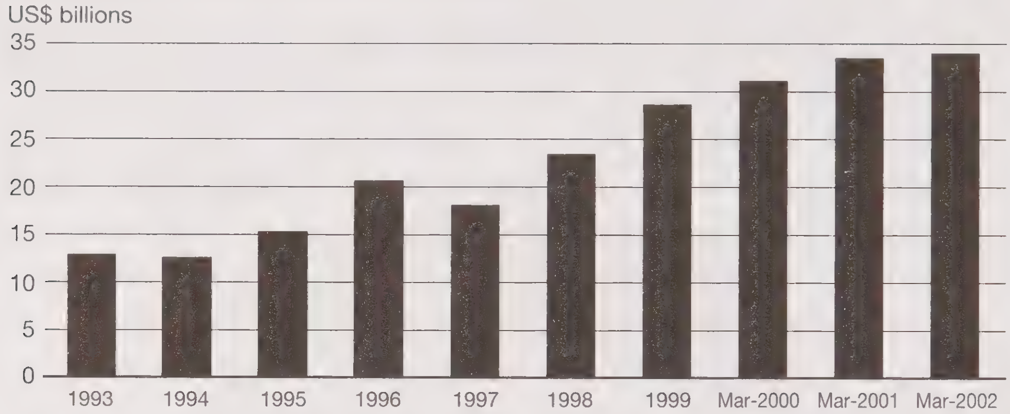
- ensure that an appropriate level of reserves is maintained while minimizing the cost of carrying reserves;
- promote orderly conditions in the foreign exchange market;
- immunize to the extent possible currency and interest rate risks by selecting reserve assets that match liabilities in currency and duration; and
- maintain diversified funding sources and a prudent liability structure to appropriately manage refinancing risks.

Level of Reserves

The Government uses cross-currency swaps, as they are a cost-effective source of foreign funds.

Canada maintains reserves in line with comparable sovereigns. In 2001-02 international reserves increased by US$0.5 billion to a level of US$34.0 billion at March 31, 2002 (see Chart 20). Borrowing requirements for foreign exchange reserves are met through cross-currency swaps of domestic obligations, which are highly cost-effective compared to other sources of foreign currency funds, and purchases of US dollars in the spot foreign exchange market. Canada Bills and Canada Notes, as well as Euro Medium-Term Notes are also used.

Chart 20
Canada's International Reserves
December 1993 to March 31, 2002



Sources: Department of Finance; International Monetary Fund, *International Financial Statistics*.

The Gap Between Foreign Currency Assets and Liabilities

The foreign currency asset-liability gap continues to narrow.

Foreign currency liabilities came to exceed foreign currency assets (i.e. deposits, securities and Canada's International Monetary Fund (IMF) reserve position),[6] which those liabilities funded in the Exchange Fund Account in recent years. This was largely a result of extensive foreign exchange intervention and important commitments to the IMF in 1998. Consistent with the Government's policy of immunizing currency and interest rate risk in Canada's reserve program, the Government has taken steps to bring foreign currency liabilities in line with foreign currency assets.

In December 1998 the Department of Finance, in collaboration with the Bank of Canada, implemented a program of purchases of US dollars in the foreign exchange markets. The proceeds of sales of Canadian dollars are used to reduce US-dollar-denominated liabilities. This program is conducted by the Bank in its role as fiscal agent for the Government in its management of the federal debt.

Purchases of US dollars are small in relation to the large daily flows in foreign exchange markets and are undertaken with sensitivity to market conditions. The objective is to close the gap between foreign currency assets and liabilities in the near future. As of March 31, 2002, the gap stood at some US$6.1 billion, and some US$3.5 billion when IMF assets are included.

[6] Note that the methodology used to measure the asset-liability gap was recently modified to include assets related to IMF commitments, which are part of Canada's official international reserves.

Risk Management Framework

The Government has in place a comprehensive risk management framework for identifying and managing treasury risk, including market, credit, operational and legal risks. The Government's risk management policies call for prudent management of treasury risks based on best practices. Standards for risk tolerance are very prudent, with market risks generally immunized and high credit quality and diversification standards followed.

The current collateral management framework helps the Government manage credit risk.

In June 2000 the Minister of Finance approved a new framework and limits governing credit exposure to commercial financial institution (FI) counterparties with respect to the Government's foreign currency reserve portfolio. The framework is consistent with best practices in credit risk management and includes a collateral management system and credit exposure limits pertaining to financial counterparties across all lines of business. Collateral management systems are increasingly the norm in capital markets as a way of managing credit risk associated with swaps. Under the new framework, high-quality collateral (e.g. cash, securities) must be posted by counterparties when the amount of credit risk borne by the Government exceeds specified limits.

A framework has been developed to collateralize US-dollar deposits at FI counterparts.

Initial steps were also taken in 2001-02 to move the Government's short-term US-dollar deposits to a collateralized basis. Currently the Government invests its US-dollar cash balances in unsecured bank deposits with a number of commercial banks. Under a revised framework, to be implemented in 2002-03, collateral will be posted to the Government when US-dollar cash is invested with the FI counterparties through repo transactions.

Management of the Government's Cash Balances

The main objectives of the federal government's cash management operations are to keep low cash balances consistent with meeting operational needs, and to invest cash in a prudent, cost-effective manner. The federal government invests its cash balances with a number of financial institutions through morning and afternoon auctions.

New Collateralized Framework for Cash Balances

The new collateralized framework for domestic cash balances will strengthen the Government's ability to manage credit risk.

In 2000 the Government announced its intention to adopt a new investment framework for the morning auction of the Government's domestic cash balances. The new framework is consistent with ongoing efforts to ensure that the Government's financing and investing operations are prudent, efficient and meet the standards of best practices appropriate for a sovereign government.

The new framework is designed to increase competition in the auction of cash balances and to strengthen the management of risks, in particular the credit risks involved in the investment of cash balances. Access to the morning auction is now open to all significant participants in the domestic money market to ensure competitive returns are earned on cash balances and to diversify the Government's counterparties. The framework also introduces a credit risk management system

through the use of credit ratings, credit lines and collateral agreements. The afternoon auction will continue to be used to invest the Government's residual cash balances and will remain uncollateralized, for the time being, and limited to Large Value Transfer System participants.

In 2001-02 the Department of Finance and the Bank of Canada finalized the major elements and operational details of the new framework in consultation with market participants. In January 2002 a competitive process was undertaken to select a collateral manager, resulting in the selection of RBC Global Services as the Government's agent.

Performance in 2001-2002

The main cash management objective is to ensure that the Government has sufficient funds to meet its operating and liquidity requirements.

Management of the Government's cash balances requires forecasting and monitoring of its daily receipt and disbursement flows, as well as an ongoing borrowing program to refinance maturing debt and maintain the balances at targeted levels. There are inherent and large uncertainties in forecasting daily changes in cash balances owing to the scope of the Government's financial operations, periodic large maturities of Government of Canada bonds, the operations of the Bank of Canada and changes in market conditions. Cash balances are kept low, consistent with operational requirements.

The level of the Government's daily cash balances averaged $9.8 billion in fiscal 2001-02, down from $10.2 billion in 2000-01. Earnings on term deposits averaged 3.49 per cent versus 5.61 per cent the previous year. Compared to the weighted cost of Treasury bill borrowings, the Government earned a positive spread of 12.1 basis points on cash balances held in 2001-02.

Debt Program Evaluation

The purpose of the Debt Program Evaluation process is to assess policies and operational decisions in the area of debt, cash and reserves management in order to inform future decision making and contribute to public transparency and good governance. Evaluations are carried out by independent evaluators with expertise in fixed-income markets.

Two debt program evaluations were conducted on the liquidity in the secondary market and the Government's fixed-rate structure.

In 2001-02 two evaluations were carried out. The first looked at initiatives undertaken by the Department of Finance to improve liquidity in Government of Canada secondary bond and bill markets. The evaluators expressed the opinion that initiatives undertaken by the Government of Canada in recent years have been successful in improving liquidity in these markets. The second evaluation looked at the Government's past decision to target a more prudent, higher fixed-rate debt structure. The evaluators expressed the opinion that Canada's debt strategy and objectives are consistent with the best practices of other sovereign borrowers as well as with current academic literature. Recommendations coming out of the evaluations addressed methodological issues and are being considered by the Government.

Annex 1

Federal Debt Management Framework

Legal Authorities

The Financial Administration Act (FAA) provides the statutory framework under which the Minister of Finance borrows money for the Government in financial markets. The FAA states that the Minister cannot borrow money without the authority of Parliament. Parliament authorizes the Minister to borrow new funds through borrowing authority acts. The Minister is authorized by the FAA to refinance maturing debt without further parliamentary authority. The Act provides the Minister with the authority to use modern financial and risk management tools and techniques such as interest rate and currency swaps, options, futures and forwards in the conduct of the Government's financial operations and for risk management purposes. In addition, the Act provides the Minister of Finance with legislative authority to establish rules governing the sale of the Government's debt.

In addition to the FAA, the Bank of Canada Act provides statutory authority for the Bank of Canada to act as the Government's fiscal agent. The Currency Act establishes the Exchange Fund Account and provides statutory authority for the Minister of Finance to manage the Account.

Institutional Responsibilities

The Department of Finance, including Canada Investment and Savings (CI&S), the Government's retail debt agency, manages federal market debt in conjunction with the Bank of Canada. The Financial Markets Division of the Department of Finance provides analysis and develops policies and recommendations for the federal government's borrowing programs, for the investment of the Government's cash and reserve assets, and for the management of financial risks.

The Division works with the Bank of Canada, the Government's fiscal agent, on all aspects of debt management. As fiscal agent, the Bank of Canada is specifically responsible for the operational aspects of debt management, for example, conducting the auctions of government debt, issuing debt instruments, making interest payments and conducting foreign currency borrowing operations. The Bank also has responsibility for monitoring market activities and advising on debt management policy issues, as well as operating the Government's Risk Management Unit.

CI&S is a special operating agency of the Department of Finance, and its primary responsibility is the day-to-day management of the Retail Debt Program. CI&S, working in consultation with the Bank of Canada and the Financial Markets Division, is responsible for developing the Retail Debt Program's strategic direction and managing the front office aspects of the program.

Domestic Debt Operations

Domestic borrowings are done strategically, i.e. securities are issued on a regular, transparent basis to maximize investor interest and participation. Marketable bonds, real return bonds (RRBs) and Treasury bills are sold via auction, with the Bank of Canada operating as the Government's fiscal agent, to Government of Canada securities distributors and end-investors. Tenders are submitted to the Bank of Canada via the electronic auction system CARS (Communications, Auctions and Reporting System).

Bonds are auctioned on a quarterly basis in the 2-, 5- and 10-year maturities, and on a semi-annual basis in the 30-year maturity. Bonds may be either new maturities or reopenings of previously auctioned bonds. New issues are generally reopened several times in order to increase the size of the issue to the target benchmark bond size.

The bond auction calendar, setting out details of the planned quarterly issuance of marketable bonds, is published by the Bank of Canada prior to the start of each quarter. Final details, including the amounts to be auctioned, the maturity date, and the amount outstanding in the case of bond reopenings, are released one week prior to the auction.

Bond sales take place via multiple-price auctions, with the exception of RRBs, which are sold via single-price auctions. Government securities distributors and investors may submit competitive tenders or non-competitive tenders. For multiple-price auctions, competitive bids are accepted in rising order of yield (declining order of price) until the full amount of the issue being auctioned is allotted, while non-competitive bids are allotted at the average of the accepted competitive bids. For single-price auctions of RRBs, bonds are allotted at the price equivalent of the highest real yield of accepted competitive tenders, plus accrued interest and inflation adjustment.

Buyback operations on a cash basis in the 2-, 5-, 10- and 30-year maturities are held shortly after periodic corresponding bond auctions. The Bank of Canada publishes with the bond auction calendar the target amount of bonds the Government intends to buy back during the quarter. Final details of individual operations, including the target amount to be bought back and the basket of eligible bonds, are released one week prior to the auction with the release of bond auction under announcement.

Buyback operations on a switch basis offer an opportunity for investors to exchange less liquid securities for new more liquid benchmark securities. Switch buybacks are held periodically in the 5-, 10- and 30-year sectors and are announced in the quarterly bond auction schedule. Final details of switch buyback operations, including eligible bonds for buyback and replacement target size, are published one week prior to the operation.

Cash management buyback operations target large bonds with less than 12 months before they mature. They are held on an irregular basis to suit government cash management needs. These operations are held on Tuesday mornings before Treasury bill auctions. Details of individual operations, including the target amount to be bought back and the basket of bond targets, are announced one week in advance with a release of the Treasury bill tender announcement.

Regular buyback and cash management buyback operations are settled on a cash basis and take place via multiple-price reverse auctions. Switch buyback operations are settled on a replacement bond and cash basis. In all buyback operations competitive offers are accepted in decreasing order of yield (increasing order of price) until the target amount to buy back is met. The target amounts may not be purchased if the offers do not meet the Government's fair value criteria.

Treasury bills are sold via auction on a discount basis. Those with terms to maturity of approximately 3, 6 and 12 months are currently auctioned on a biweekly basis, generally on a Tuesday for delivery Thursday. Under the biweekly issuance pattern, new 3-month Treasury bills are issued at each biweekly auction; new 6- and 12-month Treasury bills are offered in the same week and then reopened once at the next regular auction two weeks later.

The terms for auctions and buybacks for Government of Canada securities, the terms of participation at auctions and buybacks, the quarterly bond auction schedule, and auction and buyback results are available on the Bank of Canada's Web site at www.bankofcanada.ca.

Domestic Distribution System

The participation of distributors and end-investors at Government of Canada debt auctions is governed by a set of auction rules and terms of participation introduced in October 1998.

There are 23 government securities distributors that participate in the primary distribution of bonds and Treasury bills. All must be either members or affiliate members of the Investment Dealers Association of Canada (IDA) and have their core trading and sales operation for Government of Canada securities in Canada.

Under the auction rules and terms for participants, there are specific bidding limits that apply to government securities distributors and end-investors at Treasury bill and bond auctions. The limits vary by distributor based on the firms' relative market activity in the primary and secondary market for the securities. Separate bidding limits apply for Treasury bill and bond auctions. All government securities distributors also have ongoing reporting responsibilities to provide the Bank of Canada with market information involving Government of Canada securities. In addition, all bidders at auctions of Government of Canada securities, including customers, must abide by IDA Policy No. 5 governing standards for trading of debt securities in Canada.

Government securities distributors that maintain a certain threshold of activity in the primary and secondary market for Government of Canada securities become primary dealers, and form part of the core group of distributors of Government of Canada securities. The primary dealer classification can be attained in either Treasury bills or marketable bonds, or both. Primary dealers assume a number of responsibilities with respect to Government of Canada securities – they must comply with minimum bidding requirements for every auction so as to provide coverage at auctions as a group, and consistently make two-sided markets to a broad customer base.

Foreign Debt Operations

Foreign currency debt is made up of a short-term US-dollar paper program (Canada Bills), two medium-term note programs (Canada Notes and Euro Medium-Term Notes) and large public bond issues. These securities are issued on an opportunistic basis when required and when market conditions are favourable. The Government also obtains foreign-denominated funding through purchases of US dollars in the spot foreign exchange market and through cross-currency swaps of domestic obligations.

Retail Debt Operations

The Government sells Canada Savings Bonds (CSBs) and Canada Premium Bonds (CPBs), referred to as non-marketable savings instruments, to individuals, or "retail" investors who are Canadian residents.

Two principal channels are used for sales of CSBs and CPBs: the Payroll Savings Program and financial institutions. The Payroll Savings Program allows employees of employers sponsoring the program to purchase CSBs during the sales campaign through payroll deductions.

During the six-month sales period (October to March) Canadians can also purchase CSBs and CPBs wherever they bank or invest, including banks and trust companies, investment dealers, savings and loan companies and credit unions. Additionally, Canadians, on a pilot basis, can purchase CSBs and CPBs directly from the Government by telephone.

Annex 2

Government of Canada Market Debt Instruments

Fixed-Coupon Marketable Bonds

Effective October 1995 Government of Canada marketable bonds are issued in global certificate form only whereby a global certificate for the full amount of the bonds is issued in fully registered form in the name of CDS & Co., a nominee of the Canadian Depository for Securities Limited (CDS). The bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to December 1993 Government of Canada bonds were issued in coupon-bearer and fully registered form, and were available in denominations ranging from $1,000 to $1,000,000. Between December 1993 and September 1995 Government of Canada bonds were issued only in fully registered form. All Canadian-dollar marketable bonds are non-callable and pay a fixed rate of interest semi-annually.

Treasury Bills

Effective November 1995 all new issues of Treasury bills are issued in global certificate form only whereby a global certificate for the full amount of the Treasury bill is issued in fully registered form in the name of CDS & Co., a nominee of the CDS. Treasury bills must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service, which is operated by CDS, and only in integral multiples of $1,000 (face value). Prior to November 1995 Treasury bills were issued in bearer form and were available in denominations ranging from $1,000 to $1,000,000.

The Government of Canada also periodically issues cash management bills (CMBs). CMBs are Treasury bills with maturities of less than three months (they can be as short as one day) used as a source of short-term financing for the Government. CMB auctions can take place on any business day, typically for next-day delivery, but on some occasions for same-day delivery.

Government of Canada Real Return Bonds

Government of Canada real return bonds (RRBs) pay semi-annual interest based upon a real interest rate. Unlike standard fixed-coupon marketable bonds, interest payments on RRBs are adjusted for changes in the consumer price index (CPI). The CPI, for the purposes of RRBs, is the all-items CPI for Canada, not seasonally adjusted, published monthly by Statistics Canada. The semi-annual nominal coupon payments are calculated as follows:

coupon payment$_i$ = real coupon rate/2 × (principal + inflation compensation$_i$) where inflation compensation$_i$ = ((principal × reference CPI$_i$/reference CPI$_{base}$) – principal).

Reference CPI for the first day of any calendar month is the CPI for the third preceding calendar month. The reference CPI for any other day in a month is calculated by linear interpolation between the reference CPI applicable to the first day of the month in which such day falls and the reference CPI applicable to the first day of the month immediately following. The reference CPI_{base} for a series of bonds is the reference CPI_i applicable to the original issue date for the series.

At maturity bondholders will receive, in addition to a coupon interest payment, a final payment equal to the sum of the principal amount and the inflation compensation accrued from the original issue date, i.e. final payment = principal + ((principal x reference $CPI_{maturity}$/reference CPI_{base}) – principal).

These bonds must be purchased, transferred or sold, directly or indirectly, through a participant of the Debt Clearing Service and only in integral multiples of $1,000 (face value).

Canada Savings Bonds

Canada Savings Bonds (CSBs) are offered for sale by most financial institutions in Canada. In addition, a significant number of organizations sponsor the Payroll Savings Program, thus allowing many Canadians to purchase CSBs through payroll deductions.

Except in certain specific circumstances, CSBs can be registered only in the name of residents of Canada. They are available in both regular interest and compound interest forms. For those CSBs which are certificated, denominations range from $100 ($300 for a regular interest bond) to $10,000. All CSBs are non-callable and, except in certain limited circumstances, non-transferable.

CSBs provide minimum guaranteed annual interest rates. The minimum guaranteed annual interest rate will be increased if market conditions warrant, but the bondholder will not earn less than the rate announced for that series for the posted period. CSBs are cashable at any time and, after the first three months, pay interest up to the end of the month prior to encashment. Principal and interest are fully backed by the Government of Canada.

Canada Premium Bonds

The Canada Premium Bond (CPB) was introduced by the Government of Canada in 1998. Like CSBs, CPBs are offered for sale at most financial institutions in Canada.

CPBs offer a higher rate of interest at the time of issue compared to the CSB on sale at the same time, and are redeemable once a year on the anniversary date of the issue and during the 30 days thereafter without penalty. Once an issue date has passed, the announced interest rates for the posted period will not be changed. CPBs are available in both regular interest and compound interest forms. The compound interest bond is available for as little as $100 while the regular interest bond is available starting from $300. Principal and interest are fully backed by the Government of Canada and this bond is non-callable.

Canada Bills

Canada Bills are promissory notes denominated in US dollars and issued only in book-entry form. They mature not more than 270 days from their date of issue, and are discount obligations with a minimum order size of US$1,000,000 and a minimum denomination of US$1,000. Delivery and payment for Canada Bills occur in same-day funds through Chase Manhattan Bank in New York City.

Primary distribution of Canada Bills occurs through five dealers: CIBC Wood Gundy Inc., Credit Suisse First Boston Corporation, Goldman, Sachs & Co., Lehman Brothers Inc. and RBC Dominion Securities Inc. Rates on Canada Bills are posted daily for terms of one to six months.

Canada Bills are issued for foreign exchange reserve funding purposes only.

Canada Notes

Canada Notes are promissory notes usually denominated in US dollars and available in book-entry form. They are issued in denominations of US$1,000 and integral multiples thereof. At present the aggregate principal amount outstanding issued under the program is limited to US$10.0 billion. Notes can be issued for terms of nine months or longer, and can be issued at a fixed or a floating rate.

The interest rate or interest rate formula, issue price, stated maturity, redemption or repayment provisions, and any other terms are established by the Government of Canada at the time of issuance of the notes and will be indicated in the Pricing Supplement. Delivery and payment for Canada Notes occur through the Bank of New York.

The notes are offered by the Government through five dealers: Credit Suisse First Boston Corporation, Goldman, Sachs & Co., Lehman Brothers Inc., Nesbitt Burns Securities Inc. and Scotia Capital Markets (USA) Inc. The Government may also sell notes to other dealers or directly to investors.

Canada Notes are issued for foreign exchange reserve funding purposes only.

Euro Medium-Term Notes

Euro Medium-Term Notes (EMTNs) are medium-term notes issued outside the United States and Canada. Government of Canada EMTNs are sold either by dealers in the dealer group, or by dealers who are not in the dealer group but who are acting as the Government's agent for the particular transaction (called reverse inquiry). EMTNs are sold on a bought-deal basis (i.e. the dealer purchasing EMTNs is responsible for the sale of the notes) and on an intermittent basis.

The Arranger for the EMTN program is Morgan Stanley Dean Witter. The London-based dealer group includes CIBC World Markets plc, Goldman Sachs International, J.P. Morgan Securities Ltd., Nomura International, TD Securities, Deutsche Bank, Merrill Lynch International, Morgan Stanley Dean Witter, RBC Dominion Securities and Warburg Dillon Read.

The EMTN program further diversifies the sources of cost-effective funding for the foreign exchange reserves. Notes issued under this program can be denominated in a range of currencies and structured to meet investor demand.

EMTNs are issued for foreign exchange reserve funding purposes only.

Cross-Currency Swaps

A cross-currency swap is an agreement that exchanges one type of return for another (e.g. a fixed for a floating rate of interest) and the principal amount for the term of the swap. Cross-currency swaps of domestic obligations are a cost-effective alternative to foreign-currency-denominated bond issues as a means of meeting the Government's targets for longer-term foreign currency funding.

Annex 3

Glossary

benchmark bond: Specific issue outstanding within each class of maturities. It is considered by the market to be the standard against which all other bonds issued in that class are evaluated.

bid: Price a buyer is willing to pay.

bid-offer spread: The difference between bid and offer prices. It is typically measured in basis points (hundredths of a per cent).

budgetary surplus: Occurs when government annual revenues exceed annual budgetary expenditures. A deficit is the shortfall between government revenues and budgetary spending.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar in the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

financial requirements/source: Measures the difference between the cash coming in to the Government and the cash going out. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet the Government's financing needs in any given year.

foreign exchange reserves: Stocks of foreign exchange assets (e.g. interest-earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

gross public debt: Total amount the Government owes. It consists of both market debt in the form of outstanding securities, such as Treasury bills and Canada Savings Bonds, and internal debt owed mainly to the superannuation fund for government employees and other current liabilities.

interest-bearing debt: Consists of unmatured debt, or market debt, and the Government's liabilities to internally held accounts such as federal employees' pension plans.

market debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets, and consists of marketable bonds, Treasury bills, retail debt (primarily Canada Savings Bonds), foreign-currency-denominated bonds and bills, as well as bonds issued to the Canada Pension Plan.

marketable debt: Market debt that is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

net public debt: Consists of gross public debt net of financial assets.

non-market debt: Consists of the Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt).

non-marketable debt: Market debt that is not tradable and that is issued to retail investors (Canada Savings Bonds and Canada Premium Bonds).

offer: Price at which a seller is willing to sell.

term structure of interest rates: The levels of interest rates from short- to long-term maturities.

turnover ratio: Volume of securities traded as a percentage of securities outstanding.

Reference Tables

Reference Table I

Gross Public Debt, Outstanding Market Debt and Debt Charges

Fiscal years ending March 31	Gross public debt				Outstanding market debt			
	Outstanding	Fixed-rate portion[1]	Average fixed-rate portion[2]	Total debt charges	Outstanding	Fixed-rate portion	Total debt charges	Average interest rate
	($ billions)	(%)	(%)	($ billions)	($ billions)	(%)	($ billions)	(%)
1985-86	274.8	51.9	0	25.4	201.2	36.7	20.7	10.66
1986-87	308.9	50.9	0	26.7	228.6	36.9	21.5	9.34
1987-88	340.1	51.2	0	29.0	250.8	38.2	23.1	9.61
1988-89	371.5	49.6	0	33.2	276.3	37.2	26.5	10.82
1989-90	397.2	49.9	0	38.8	294.6	38.1	31.4	11.20
1990-91	433.3	50.4	0	42.6	323.9	38.5	34.3	10.72
1991-92	467.4	50.7	0	41.2	351.9	38.9	32.4	8.86
1992-93	503.9	50.4	0	38.8	382.7	39.0	29.4	7.88
1993-94	546.4	53.3	0	38.0	414.0	42.7	28.0	6.75
1994-95	584.8	55.1	0	42.0	441.0	44.4	31.4	7.97
1995-96	624.7	56.9	0	46.9	469.5	47.9	35.3	7.34
1996-97	640.7	61.7	0	45.0	476.9	53.8	33.0	6.66
1997-98	638.5	63.7	0	40.9	467.3	56.8	31.0	6.64
1998-99	640.3	64.5	66.6	41.4	460.4	58.5	30.8	6.70
1999-00	638.7	66.5	66.6	41.6	456.4	59.1	30.5	6.15
2000-01	632.9	67.8	67.6	42.1	446.4	60.5	30.7	6.11
2001-02	624.1	67.4	67.6	37.7	442.3	60.1	27.1	5.56

Note: Variances in the maturity structure of the debt will cause the fixed ratio to vary modestly on a monthly basis.

[1] As of March 31 and after adjusting for non-interest-bearing liabilities. Definition of fixed debt may vary slightly from year to year to accommodate changes in the debt structure.

[2] Average over the year. Comparative figures for prior years are not available.

Sources: *Public Accounts of Canada, Bank of Canada Review*, Department of Finance estimates.

Reference Table II

Government of Canada Outstanding Market Debt

Fiscal years ending March 31	Payable in Canadian dollars					Payable in foreign currencies						
	Treasury bills	Marketable bonds	Retail debt	CPP bonds	Total	Marketable bonds	Canada Bills	Canada Notes[1]	Standby drawings	Term loans	Total	Total market debt
	(C$ millions)											
1977-78	11,295	21,645	18,036	84	51,060	181	0	0	850	0	1,031	51,664
1978-79	13,535	26,988	19,443	96	60,062	3,319	0	0	2,782	1,115	7,216	66,640
1979-80	16,325	33,387	18,182	113	68,007	3,312	0	0	359	1,030	4,701	72,021
1980-81	21,770	40,976	15,966	136	78,848	3,236	0	0	355	1,046	4,637	83,138
1981-82	19,375	43,605	25,108	154	88,242	3,867	0	0	0	550	4,417	93,167
1982-83	29,125	48,473	32,753	171	110,522	4,872	0	0	0	362	5,234	116,562
1983-84	41,700	56,976	38,403	189	137,268	4,306	0	0	510	398	5,214	142,901
1984-85	52,300	69,354	42,167	205	164,026	4,972	0	0	1,909	1,172	8,053	172,719
1985-86	61,950	81,163	44,607	445	188,165	9,331	0	0	2,233	2,247	13,811	201,229
1986-87	76,950	94,520	43,854	1,796	217,120	9,120	1,045	0	0	2,047	12,212	228,611
1987-88	81,050	103,899	52,558	2,492	239,999	8,438	1,045	0	0	2,257	11,740	250,809
1988-89	102,700	115,748	47,048	3,005	268,501	6,672	1,131	0	0	934	8,737	276,301
1989-90	118,550	127,681	40,207	3,072	289,510	4,364	1,446	0	0	0	5,810	294,562
1990-91	139,150	143,601	33,782	3,492	320,025	3,555	1,008	0	0	0	4,563	323,903
1991-92	152,300	158,059	35,031	3,501	348,891	3,535	0	0	0	0	3,535	351,885
1992-93	162,050	178,436	33,884	3,505	377,875	2,926	2,552	0	0	0	5,478	382,741
1993-94	166,000	203,373	30,866	3,497	403,736	5,019	5,649	0	0	0	10,668	413,975
1994-95	164,450	225,513	30,756	3,488	424,207	7,875	9,046	0	0	0	16,921	440,998
1995-96	166,100	252,411	30,801	3,478	452,790	9,514	6,986	310	0	0	16,810	469,547
1996-97	135,400	282,059	32,911	3,468	453,838	12,460	8,436	2,121	0	0	23,017	476,852
1997-98	112,300	293,987	30,302	3,456	440,045	14,590	9,356	3,176	0	0	27,122	467,291
1998-99	96,950	294,914	28,810	4,063	424,737	19,655	10,171	6,182	0	0	36,008	460,427
1999-00	99,850	293,250	27,115	3,427	423,642	21,464	6,008	5,168	0	0	32,640	456,406
2000-01	88,700	293,879	26,457	3,404	412,440	20,509	7,228	5,695	0	0	33,432	445,724
2001-02	94,200	292,910	24,229	3,386	414,725	19,652	3,355	4,405	0	0	27,412	442,137

Note: Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

[1] Includes EMTNs.

Sources: *Bank of Canada Review*, Department of Finance.

Reference Table III

Average Weekly Domestic Market Trading in Government of Canada Securities, April 2001 to March 2002

		Marketable bonds					
	Treasury bills	3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	Total
				($ millions)			
April 2001	24,052	30,054	33,382	9,311	328	73,074	97,126
May 2001	19,861	35,208	33,918	11,382	340	80,848	100,709
June 2001	19,316	28,624	33,689	7,652	216	70,181	89,497
July 2001	17,774	20,643	26,772	5,013	94	52,522	70,296
August 2001	16,275	28,201	27,635	5,975	77	61,889	78,165
September 2001	18,679	35,053	30,834	7,721	250	73,858	92,537
October 2001	18,910	32,433	33,035	8,206	105	73,779	92,689
November 2001	19,937	34,886	39,418	9,332	138	83,775	103,712
December 2001	19,547	33,533	29,851	6,388	85	69,856	89,403
January 2002	19,772	29,634	28,315	6,692	85	64,726	84,498
February 2002	19,409	25,878	32,397	8,349	46	66,670	86,078
March 2002	19,503	45,805	35,612	11,061	213	92,691	112,195

Source: Bank of Canada, *Banking and Financial Statistics.*

Reference Table IV

Distribution of Domestic Holdings of Government of Canada Securities

PART A – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[1]	Total
					($ millions)				
1976	17,932	395	8,242	8,666	716	1,436	2,273	730	40,390
1977	20,277	321	10,268	9,601	1,048	2,271	3,114	1,014	47,914
1978	22,723	403	12,001	9,896	1,537	3,738	4,017	1,721	56,036
1979	23,144	374	13,656	10,156	1,684	6,716	4,103	2,878	62,711
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,425	520	17,100	10,003	2,452	10,569	5,342	4,194	83,605
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,551	17,816	9,984	5,321	126,446
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,331	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,550
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,732	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207,271
1988	86,591	8,634	20,606	21,115	7,492	42,460	19,028	17,186	223,112
1989	81,566	11,402	21,133	20,804	9,854	48,037	23,950	17,840	234,586
1990	80,079	11,797	20,325	24,224	10,460	52,984	26,051	19,574	245,494
1991	72,945	11,580	22,370	35,792	12,091	57,846	33,054	21,015	266,693
1992	70,930	13,696	22,607	44,555	12,428	62,042	39,396	20,222	285,876
1993	61,221	10,359	23,498	60,242	11,229	69,917	45,321	18,397	300,184
1994	52,842	12,039	24,902	70,063	9,992	78,545	52,847	24,967	326,197
1995	48,867	12,048	23,590	76,560	10,947	87,467	59,044	26,324	344,847
1996	46,187	10,013	25,556	74,789	10,952	90,174	71,514	24,828	354,013
1997	39,924	10,470	27,198	67,715	7,054	94,991	79,445	25,509	352,306
1998	33,537	8,525	27,911	66,375	6,659	99,687	79,895	28,174	350,763
1999	37,118	9,290	29,075	54,080	7,944	108,656	81,257	28,394	355,814
2000	33,259	9,062	31,726	58,269	2,842	108,752	73,911	30,280	348,101
2001	33,979	7,643	37,204	65,396	3,561	99,744	76,482	34,341	358,350

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART B – Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					(%)				
1976	44.40	0.98	20.41	21.46	1.77	3.56	5.63	1.81	100.00
1977	42.32	0.67	21.43	20.04	2.19	4.74	6.50	2.12	100.00
1978	40.55	0.72	21.42	17.66	2.74	6.67	7.17	3.07	100.00
1979	36.91	0.60	21.78	16.19	2.69	10.71	6.54	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.98	0.62	20.45	11.96	2.93	12.64	6.39	5.02	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.78	4.35	13.33	11.95	4.39	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.40	4.14	9.75	7.73	3.09	18.75	9.43	6.71	100.00
1988	38.81	3.87	9.24	9.46	3.36	19.03	8.53	7.70	100.00
1989	34.77	4.86	9.01	8.87	4.20	20.48	10.21	7.60	100.00
1990	32.62	4.81	8.28	9.87	4.26	21.58	10.61	7.97	100.00
1991	27.35	4.34	8.39	13.42	4.53	21.69	12.39	7.88	100.00
1992	24.81	4.79	7.91	15.59	4.35	21.70	13.78	7.07	100.00
1993	20.39	3.45	7.83	20.07	3.74	23.29	15.10	6.13	100.00
1994	16.20	3.69	7.63	21.48	3.06	24.08	16.20	7.65	100.00
1995	14.17	3.49	6.84	22.20	3.17	25.36	17.12	7.63	100.00
1996	13.05	2.83	7.22	21.13	3.09	25.47	20.20	7.01	100.00
1997	11.33	2.97	7.72	19.22	2.00	26.96	22.55	7.24	100.00
1998	9.56	2.43	7.96	18.92	1.90	28.42	22.78	8.03	100.00
1999	10.43	2.61	8.17	15.20	2.23	30.54	22.84	7.98	100.00
2000	9.55	2.60	9.11	16.74	0.82	31.24	21.23	8.70	100.00
2001	9.48	2.13	10.38	18.25	0.99	27.83	21.34	9.58	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART C – Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	171	125	1,964	4,219	52	44	515	193	7,283
1977	394	136	2,461	4,949	143	98	1,020	311	9,512
1978	576	198	3,567	5,517	193	261	1,554	519	12,385
1979	785	165	4,345	6,690	65	245	1,550	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,180	2,587	5,376	1,286	36,815
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,733	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,267
1988	20,213	7,414	9,945	15,224	5,614	7,648	9,133	7,726	82,917
1989	29,156	9,668	11,124	17,410	8,116	9,664	12,908	9,251	107,297
1990	36,461	10,756	10,574	17,841	8,976	11,737	13,298	9,388	119,031
1991	30,423	10,437	13,093	24,382	9,089	12,386	17,636	10,417	127,863
1992	32,901	11,254	14,634	27,989	9,646	13,639	19,907	8,726	138,696
1993	27,459	9,657	16,876	29,901	9,222	17,085	22,336	7,151	139,687
1994	17,562	8,499	18,973	30,415	6,879	14,376	22,021	10,631	129,356
1995	16,296	9,204	18,298	30,865	7,760	15,315	25,183	10,603	133,524
1996	10,474	8,285	17,593	23,470	5,493	13,520	32,752	6,264	117,851
1997	5,966	6,858	14,233	19,448	3,133	8,944	32,653	3,803	95,038
1998	1,291	6,215	10,729	16,713	2,392	4,529	32,508	3,578	77,955
1999	8,539	6,662	8,584	9,814	3,234	8,128	36,932	3,497	85,390
2000	7,568	6,735	8,090	6,188	685	7,222	31,087	5,108	72,683
2001	8,744	6,990	11,427	9,969	675	10,401	37,154	6,838	92,198

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART D – Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					(%)				
1976	2.35	1.72	26.97	57.93	0.71	0.60	7.07	2.65	100.00
1977	4.14	1.43	25.87	52.03	1.50	1.03	10.72	3.27	100.00
1978	4.65	1.60	28.80	44.55	1.56	2.11	12.55	4.19	100.00
1979	5.34	1.12	29.58	45.55	0.44	1.67	10.55	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.23	13.98	7.05	34.98	8.64	7.03	14.60	3.49	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.60	10.44	13.98	16.60	5.38	6.94	13.84	7.22	100.00
1988	24.38	8.94	11.99	18.36	6.77	9.22	11.01	9.32	100.00
1989	27.17	9.01	10.37	16.23	7.56	9.01	12.03	8.62	100.00
1990	30.63	9.04	8.88	14.99	7.54	9.86	11.17	7.89	100.00
1991	23.79	8.16	10.24	19.07	7.11	9.69	13.79	8.15	100.00
1992	23.72	8.11	10.55	20.18	6.95	9.83	14.35	6.29	100.00
1993	19.66	6.91	12.08	21.41	6.60	12.23	15.99	5.12	100.00
1994	13.58	6.57	14.67	23.51	5.32	11.11	17.02	8.22	100.00
1995	12.20	6.89	13.70	23.12	5.81	11.47	18.86	7.94	100.00
1996	8.89	7.03	14.93	19.91	4.66	11.47	27.79	5.32	100.00
1997	6.28	7.22	14.98	20.46	3.30	9.41	34.36	4.00	100.00
1998	1.66	7.97	13.76	21.44	3.07	5.81	41.70	4.59	100.00
1999	10.00	7.80	10.05	11.49	3.79	9.52	43.25	4.10	100.00
2000	10.41	9.27	11.13	8.51	0.94	9.94	42.77	7.03	100.00
2001	9.48	7.58	12.39	10.81	0.73	11.28	40.30	7.42	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART E – Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	17,761	270	6,278	4,447	664	1,392	1,758	537	33,107
1977	19,883	185	7,807	4,652	905	2,173	2,094	703	38,402
1978	22,147	205	8,434	4,379	1,344	3,477	2,463	1,202	43,651
1979	22,359	209	9,311	3,466	1,619	6,471	2,553	2,035	48,023
1980	22,760	267	10,541	2,502	2,152	8,814	3,130	2,736	52,902
1981	32,406	151	11,669	1,406	2,109	10,009	3,155	3,112	64,017
1982	41,083	337	12,945	1,199	1,931	11,907	4,169	3,455	77,026
1983	46,540	356	14,264	2,228	2,371	15,229	4,608	4,035	89,631
1984	53,294	508	13,669	2,167	2,095	20,163	5,434	4,668	101,998
1985	60,991	870	11,683	2,569	2,055	27,144	6,957	5,970	118,239
1986	54,915	1,384	10,407	2,618	2,568	31,295	8,250	7,877	119,314
1987	65,999	1,359	10,519	4,514	2,675	34,064	9,958	8,916	138,004
1988	66,378	1,220	10,661	5,891	1,878	34,812	9,895	9,460	140,195
1989	52,410	1,734	10,009	3,394	1,738	38,373	11,042	8,589	127,289
1990	43,618	1,041	9,751	6,383	1,484	41,247	12,753	10,186	126,463
1991	42,522	1,143	9,277	11,410	3,002	45,460	15,418	10,598	138,830
1992	38,029	2,442	7,973	16,566	2,782	48,403	19,489	11,496	147,180
1993	33,762	702	6,622	30,341	2,007	52,832	22,985	11,246	160,497
1994	35,280	3,540	5,929	39,648	3,113	64,169	30,826	14,336	196,841
1995	32,571	2,844	5,292	45,695	3,187	72,152	33,861	15,721	211,323
1996	35,713	1,728	7,963	51,319	5,459	76,654	38,762	18,564	236,162
1997	33,958	3,612	12,965	48,267	3,921	86,047	46,792	21,706	257,268
1998	32,246	2,310	17,182	49,662	4,267	95,158	47,387	24,596	272,808
1999	28,579	2,628	20,491	44,266	4,710	100,528	44,325	24,897	270,424
2000	25,691	2,327	23,636	52,081	2,157	101,530	42,824	25,172	275,418
2001	25,235	653	25,777	55,427	2,886	89,343	39,328	27,503	266,152

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART F – Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total
					(%)				
1976	53.65	0.82	18.96	13.43	2.01	4.20	5.31	1.62	100.00
1977	51.78	0.48	20.33	12.11	2.36	5.66	5.45	1.83	100.00
1978	50.74	0.47	19.32	10.03	3.08	7.97	5.64	2.75	100.00
1979	46.56	0.44	19.39	7.22	3.37	13.47	5.32	4.24	100.00
1980	43.02	0.50	19.93	4.73	4.07	16.66	5.92	5.17	100.00
1981	50.62	0.24	18.23	2.20	3.29	15.63	4.93	4.86	100.00
1982	53.34	0.44	16.81	1.56	2.51	15.46	5.41	4.49	100.00
1983	51.92	0.40	15.91	2.49	2.65	16.99	5.14	4.50	100.00
1984	52.25	0.50	13.40	2.12	2.05	19.77	5.33	4.58	100.00
1985	51.58	0.74	9.88	2.17	1.74	22.96	5.88	5.05	100.00
1986	46.03	1.16	8.72	2.19	2.15	26.23	6.91	6.60	100.00
1987	47.82	0.98	7.62	3.27	1.94	24.68	7.22	6.46	100.00
1988	47.35	0.87	7.60	4.20	1.34	24.83	7.06	6.75	100.00
1989	41.17	1.36	7.86	2.67	1.37	30.15	8.67	6.75	100.00
1990	34.49	0.82	7.71	5.05	1.17	32.62	10.08	8.05	100.00
1991	30.63	0.82	6.68	8.22	2.16	32.75	11.11	7.63	100.00
1992	25.84	1.66	5.42	11.26	1.89	32.89	13.24	7.81	100.00
1993	21.04	0.44	4.13	18.90	1.25	32.92	14.32	7.01	100.00
1994	17.92	1.80	3.01	20.14	1.58	32.60	15.66	7.28	100.00
1995	15.41	1.35	2.50	21.62	1.51	34.14	16.02	7.44	100.00
1996	15.12	0.73	3.37	21.73	2.31	32.46	16.41	7.86	100.00
1997	13.20	1.40	5.04	18.76	1.52	33.45	18.19	8.44	100.00
1998	11.82	0.85	6.30	18.20	1.56	34.88	17.37	9.02	100.00
1999	10.57	0.97	7.58	16.37	1.74	37.17	16.39	9.21	100.00
2000	9.33	0.84	8.58	18.91	0.78	36.86	15.55	9.14	100.00
2001	9.48	0.25	9.69	20.83	1.08	33.57	14.78	10.33	100.00

Note: Because of timing and valuation differences, *The National Balance Sheet Accounts* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report are on a par-value basis – that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

[1] Includes bonds denominated in foreign currencies.

[2] Includes Quebec savings banks, credit unions and caisses populaires, trust companies and mortgage loan companies.

[3] Includes investment dealers, mutual funds, property and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

[4] Includes federal government holdings of its own debt, provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

[5] May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts.*

Reference Table V

Non-Resident (Direct) Holdings of Government of Canada Debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada Bills	Total	Total as per cent of total market debt
		(C$ billions)		(%)
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	8.7
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.6
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.0
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.5
1987	30.3	4.7	35.0	15.3
1988	33.0	9.3	42.3	16.9
1989	41.3	15.7	57.0	20.6
1990	49.9	13.3	63.2	21.5
1991	57.6	16.1	73.7	22.8
1992	63.6	23.0	86.6	24.6
1993	80.1	28.3	108.4	28.3
1994	79.3	34.0	113.3	27.4
1995	73.7	39.2	112.9	25.6
1996	84.1	37.7	121.8	25.9
1997	91.8	27.7	119.4	25.0
1998	94.3	20.0	114.3	24.5
1999	86.6	19.4	106.0	23.0
2000	85.7	14.2	99.9	21.9
2001	83.5	10.5	94.0	21.1
2002	74.0	7.4	81.4	18.4

Note: Numbers may not add due to rounding.

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities.*

Reference Table VI

Fiscal 2001-02 Treasury Bill Program

Settlement Date	Maturing					New issues					Net increment			Average tender yields			
	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
	($ millions)													(%)			
05-Apr-2001	–	–	–	–	–	–	–	–	–	–	–	0	88,700				
12-Apr-2001	2,000	3,500	2,800	–	8,300	–	4,100	1,700	1,700	7,500	-800	-800	87,900		4.49	4.52	4.53
19-Apr-2001	–	–	–	–	–	–	–	–	–	–	–	-800	87,900				
26-Apr-2001	–	3,800	–	3,100	6,900	–	3,800	1,600	1,600	7,000	100	–700	88,000		4.41	4.36	4.43
03-May-2001	–	–	–	–	–	–	–	–	–	–	–	–700	88,000				
10-May-2001	2,000	4,100	2,800	–	8,900	–	3,800	1,600	1,600	7,000	–1,900	–2,600	86,100		4.31	4.28	4.38
17-May-2001	–	–	–	–	–	2,000	–	–	–	2,000	2,000	–600	88,100	4.41			
24-May-2001	–	4,100	–	2,800	6,900	–	3,500	1,500	1,500	6,500	–400	–1,000	87,700		4.40	4.45	4.60
31-May-2001	–	–	–	–	–	–	–	–	–	–	–	-1,000	87,700				
07-Jun-2001	–	4,100	2,800	–	6,900	–	3,200	1,400	1,400	6,000	-900	-1,900	86,800		4.32	4.38	4.50
14-Jun-2001	–	–	–	–	–	–	–	–	–	–	–	-1,900	86,800				
21-Jun-2001	2,000	4,100	–	2,600	8,700	–	3,200	1,400	1,400	6,000	-2,700	-4,600	84,100		4.24	4.29	4.39
28-Jun-2001	–	–	–	–	–	–	–	–	–	–	–	-4,600	84,100				
05-Jul-2001	–	4,100	3,100	–	7,200	–	3,200	1,400	1,400	6,000	-1,200	-5,800	82,900		4.36	4.47	4.63
12-Jul-2001	–	–	–	–	–	–	–	–	–	–	–	-5,800	82,900				
19-Jul-2001	–	4,100	–	2,700	6,800	–	3,500	1,500	1,500	6,500	-300	-6,100	82,600		4.16	4.26	4.45
26-Jul-2001	–	–	–	–	–	–	–	–	–	–	–	-6,100	82,600				
02-Aug-2001	–	3,800	3,400	–	7,200	–	3,800	1,600	1,600	7,000	-200	-6,300	82,400		4.03	4.06	4.21
09-Aug-2001	–	–	–	–	–	–	–	–	–	–	–	-6,300	82,400				
16-Aug-2001	–	3,800	–	2,900	6,700	–	3,800	1,600	1,600	7,000	300	-6,000	82,700		3.95	3.97	4.09
23-Aug-2001	–	–	–	–	–	–	–	–	–	–	–	-6,000	82,700				
30-Aug-2001	–	3,500	3,400	–	6,900	1,500	3,800	1,600	1,600	8,500	1,600	-4,400	84,300	3.93	3.80	3.84	3.90
06-Sep-2001	–	–	–	–	–	–	–	–	–	–	–	-4,400	84,300				
13-Sep-2001	1,500	3,200	–	2,800	7,500	–	3,800	1,600	1,600	7,000	-500	-4,900	83,800		3.35	3.38	3.38
20-Sep-2001	–	–	–	–	–	–	–	–	–	–	–	-4,900	83,800				
27-Sep-2001	–	3,200	3,400	–	6,600	–	4,100	1,700	1,700	7,500	900	-4,000	84,700		3.04	2.97	2.99
04-Oct-2001	–	–	–	–	–	–	–	–	–	–	–	-4,000	84,700				
11-Oct-2001	–	3,200	–	2,800	6,000	–	4,100	1,700	1,700	7,500	1,500	-2,500	86,200		2.95	2.87	2.89
18-Oct-2001	–	–	–	–	–	–	–	–	–	–	–	-2,500	86,200				
25-Oct-2001	–	3,500	3,200	–	6,700	–	4,400	1,800	1,800	8,000	1,300	-1,200	87,500		2.54	2.53	2.63

Reference Table VI *(cont'd)*
Fiscal 2001-02 Treasury Bill Program

Settlement	Maturing					New issues					Net increment			Average tender yields			
Date	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
							($ millions)								(%)		
01-Nov-2001	–	–	–	–	–	–	–	–	–	–	–	-1,200	87,500				
08-Nov-2001	–	3,800	–	2,800	6,600	–	4,400	1,800	1,800	8,000	1,400	200	88,900		2.28	2.27	2.32
15-Nov-2001	–	–	–	–	–	–	–	–	–	–	–	200	88,900				
22-Nov-2001	–	3,800	2,900	–	6,700	1,500	4,400	1,800	1,800	9,500	2,800	3,000	91,700	2.26	2.21	2.31	2.54
29-Nov-2001	–	–	–	–	–	2,500	–	–	–	2,500	2,500	5,500	94,200	2.16			
06-Dec-2001	–	3,800	–	2,800	6,600	–	4,400	1,800	1,800	8,000	1,400	6,900	95,600		2.05	2.05	2.35
13-Dec-2001	–	–	–	–	–	–	–	–	–	–	–	6,900	95,600				
20-Dec-2001	1,500	3,800	2,800	–	8,100	–	4,100	1,700	1,700	7,500	-600	6,300	95,000		1.99	2.06	2.35
27-Dec-2001	–	–	–	–	–	–	–	–	–	–	–	6,300	95,000				
03-Jan-2002	2,500	4,100	–	3,100	9,700	–	4,100	1,700	1,700	7,500	-2,200	4,100	92,800		1.91	1.98	2.28
10-Jan-2002	–	–	–	–	–	–	–	–	–	–	–	4,100	92,800				
17-Jan-2002	–	4,100	3,100	–	7,200	–	4,400	1,800	1,800	8,000	800	4,900	93,600		1.90	1.96	2.15
24-Jan-2002	–	–	–	–	–	–	–	–	–	–	–	4,900	93,600				
31-Jan-2002	–	4,400	–	3,400	7,800	–	4,400	1,800	1,800	8,000	200	5,100	93,800		1.97	2.12	2.45
07-Feb-2002	–	–	–	–	–	–	–	–	–	–	–	5,100	93,800				
14-Feb-2002	–	4,400	3,200	–	7,600	–	4,400	1,800	1,800	8,000	400	5,500	94,200		2.00	2.15	2.48
21-Feb-2002	–	–	–	–	–	–	–	–	–	–	–	5,500	94,200				
28-Feb-2002	–	4,400	–	3,400	7,800	–	4,400	1,800	1,800	8,000	200	5,700	94,400		2.07	2.22	2.64
07-Mar-2002	–	–	–	–	–	–	–	–	–	–	–	5,700	94,400				
14-Mar-2002	–	4,400	3,300	–	7,700	–	4,100	1,700	1,700	7,500	-200	5,500	94,200		2.15	2.44	3.05
21-Mar-2002	–	–	–	–	–	–	–	–	–	–	–	5,500	94,200				
28-Mar-2002	–	4,100	–	3,400	7,500	–	4,100	1,700	1,700	7,500	–	5,500	94,200		2.34	2.72	3.48
Total	**11,500**	**101,200**	**40,200**	**38,600**	**191,500**	**7,500**	**103,300**	**43,100**	**43,100**	**197,000**	**5,500**	**-1,200**	**4,611,200**				

[1] Cash management bill.

[2] Outstanding.

Source: Bank of Canada.

Reference Table VII

Fiscal 2001-02 Treasury Bill Auction Results

Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail	Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail
	(months)	($ millions)	($)	(%)		(basis points)		(months)	($ millions)	($)	(%)		(basis points)
10-Apr-2001	12	1,700	95.840	4.527	1.565	1.1	09-Oct-2001	12	1,700	97.200	2.889	1.919	0.7
10-Apr-2001	3	4,100	98.808	4.493	1.452	1.7	09-Oct-2001	3	4,100	99.213	2.955	1.842	0.9
10-Apr-2001	6	1,700	97.960	4.525	2.021	1.0	09-Oct-2001	6	1,700	98.591	2.866	1.969	1.1
24-Apr-2001	12	1,600	95.767	4.432	1.733	1.3	23-Oct-2001	12	1,800	97.543	2.627	2.013	1.2
24-Apr-2001	3	3,800	98.830	4.410	1.544	1.8	23-Oct-2001	3	4,400	99.323	2.540	1.852	1.7
24-Apr-2001	6	1,600	97.871	4.363	1.939	1.0	23-Oct-2001	6	1,800	98.848	2.532	2.306	0.6
08-May-2001	12	1,600	95.969	4.380	2.095	0.4	06-Nov-2001	12	1,800	97.739	2.320	2.086	0.8
08-May-2001	3	3,800	98.855	4.313	1.942	0.7	06-Nov-2001	3	4,400	99.391	2.281	1.805	0.9
08-May-2001	6	1,600	98.066	4.284	1.831	1.1	06-Nov-2001	6	1,800	98.881	2.269	1.989	0.8
22-May-2001	12	1,500	95.617	4.597	1.745	1.3	20-Nov-2001	12	1,800	97.620	2.543	1.514	1.7
22-May-2001	3	3,500	98.832	4.401	1.862	0.9	20-Nov-2001	3	4,400	99.411	2.207	1.753	1.3
22-May-2001	6	1,500	97.828	4.453	2.028	0.7	20-Nov-2001	6	1,800	98.948	2.309	2.088	0.9
05-Jun-2001	12	1,400	95.863	4.501	1.916	0.9	04-Dec-2001	12	1,800	97.712	2.348	1.929	0.5
05-Jun-2001	3	3,200	98.854	4.317	1.851	0.7	04-Dec-2001	3	4,400	99.453	2.048	1.831	0.9
05-Jun-2001	6	1,400	98.025	4.378	2.420	0.2	04-Dec-2001	6	1,800	98.987	2.052	1.896	0.6
19-Jun-2001	12	1,400	95.804	4.392	2.212	0.8	18-Dec-2001	12	1,700	97.797	2.349	1.814	0.6
19-Jun-2001	3	3,200	98.874	4.242	2.221	0.5	18-Dec-2001	3	4,100	99.467	1.996	2.065	0.4
19-Jun-2001	6	1,400	97.906	4.289	2.220	0.4	18-Dec-2001	6	1,700	99.061	2.059	1.942	0.5
03-July-2001	12	1,400	95.750	4.629	1.891	0.4	03-Jan-2002	12	1,700	97.775	2.276	1.906	0.9
03-July-2001	3	3,200	98.842	4.364	1.909	0.5	03-Jan-2002	3	4,100	99.490	1.911	1.799	0.9
03-July-2001	6	1,400	97.984	4.470	2.067	0.8	03-Jan-2002	6	1,700	99.022	1.981	1.881	1.3
17-July-2001	12	1,500	95.753	4.448	1.714	0.5	15-Jan-2002	12	1,800	97.973	2.151	1.706	1.3
17-July-2001	3	3,500	98.894	4.164	1.910	0.3	15-Jan-2002	3	4,400	99.492	1.901	1.810	1.2
17-July-2001	6	1,500	97.918	4.265	2.194	0.8	15-Jan-2002	6	1,800	99.105	1.961	1.989	0.7
31-July-2001	12	1,600	96.121	4.209	2.045	0.5	29-Jan-2002	12	1,800	97.619	2.446	1.955	0.9
31-July-2001	3	3,800	98.930	4.029	2.056	0.6	29-Jan-2002	3	4,400	99.475	1.966	1.935	1.0
31-July-2001	6	1,600	98.166	4.058	2.092	0.6	29-Jan-2002	6	1,800	98.953	2.122	2.006	0.6
14-Aug-2001	12	1,600	96.078	4.093	1.822	0.7	12-Feb-2002	12	1,800	97.673	2.484	1.842	0.8
14-Aug-2001	3	3,800	98.951	3.950	1.825	0.8	12-Feb-2002	3	4,400	99.466	2.001	1.903	0.9
14-Aug-2001	6	1,600	98.059	3.969	2.077	0.8	12-Feb-2002	6	1,800	99.019	2.152	2.085	0.8
28-Aug-2001	12	1,600	96.394	3.901	2.228	0.4	26-Feb-2002	12	1,800	97.436	2.639	1.650	1.1
28-Aug-2001	3	3,800	98.989	3.805	1.754	0.9	26-Feb-2002	3	4,400	99.447	2.070	1.747	1.0
28-Aug-2001	6	1,600	98.264	3.838	2.288	0.7	26-Feb-2002	6	1,800	98.903	2.224	1.790	0.6
13-Sept-2001	12	1,600	96.742	3.377	1.957	1.3	12-Mar-2002	12	1,700	97.158	3.050	1.601	2.0
13-Sept-2001	3	3,800	99.109	3.348	1.657	10.2	12-Mar-2002	3	4,100	99.426	2.152	1.881	0.8
13-Sept-2001	6	1,600	98.342	3.381	1.828	2.3	12-Mar-2002	6	1,700	98.891	2.436	1.791	1.3
25-Sept-2001	12	1,700	97.214	2.989	2.092	0.9	26-Mar-2002	12	1,700	96.643	3.483	2.077	0.7
25-Sept-2001	3	4,100	99.191	3.039	1.802	1.1	26-Mar-2002	3	4,100	99.375	2.343	2.005	0.7
25-Sept-2001	6	1,700	98.649	2.975	2.149	0.5	26-Mar-2002	6	1,700	98.659	2.725	2.058	0.7
							Total		189,500				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

Source: Bank of Canada.

Reference Table VIII

Fiscal 2001-02 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Fixed-coupon bonds						
2001	**2001**					
April 10	April 12				280	-280
April 18	April 23	June 1, 2029		1,900	249	1,651
	May 1*		1,325			-1,325
May 2	May 7	June 1, 2011		2,500	400	2,100
May 8	May 10				1,000	-1,000
	June 1*		7,811			-7,811
May 30	June 4	September 1, 2006		2,500	400	2,100
June 5	June 7				1,000	-1,000
June 13	June 15	December 1, 2003		3,500	350	3,150
July 3	July 5				750	-750
July 17	July 19				750	-750
July 25	July 30	June 1, 2011		2,400	500	1,900
July 31	August 2				750	-750
August 15	August 20	September 1, 2006		2,500	400	2,100
August 29	August 31	December 1, 2003		3,500	500	3,000
	September 4*		8,267			-8,267
September 25	September 27				750	-750
October 9	October 11				750	-750
	October 1*		894			-894
October 10	October 15	June 1, 2033		2,000	500	1,500
October 23	October 25				750	-750
October 24	October 29	June 1, 2012		2,500	397	2,103
November 6	November 8				179	-179
November 14	November 19	September 1, 2007		2,500	153	2,347
November 28	November 30	June 1, 2004		3,500	311	3,189
	December 3*		7,041			-7,041

Reference Table VIII *(cont'd)*

Fiscal 2001-02 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Fixed-coupon bonds						
2002						
January 15	January 17				500	-500
January 16	January 21	June 1, 2033		2,000	386	1,614
January 29	January 31				750	-750
	February 1*		213			-213
February 6	February 11	June 1, 2012		2,500	400	2,100
February 12	February 14				750	-750
February 13	February 18	September 1, 2007		2,500	133	2,367
February 26	February 28				535	-535
February 27	March 4	June 1, 2033		400	387	13
March 6	March 8	June 1, 2004		3,500	178	3,322
	March 15*		339			-339
March 12	March 14				1,000	-1,000
March 26	March 28				1,000	-1,000
Real Return Bonds						
2001						
June 6	June 11	December 1, 2031		350		350
September 12	September 24	December 1, 2031		300		300
December 5	December 10	December 1, 2031		350		350
2002						
March 13	March 18	December 1, 2031		350		350
Total fiscal year 2001-2002			**25,890**	**41,550**	**17,138**	**-1,478**

* Maturing date.

Source: Bank of Canada.

Reference Table IX

Fiscal 2001-02 Marketable Bond Auction Results

Auction date	Term	Maturity date	Coupon rate	Issue amount	Average price	Average yield	Auction coverage	Tail
	(years)		(%)	($ millions)	($)	(%)		(basis points)
18-Apr-2001	30	1-Jun-2029	5.75	1,900	97.185	5.957	2.49	0.5
02-May-2001	10	1-Jun-2011	6.00	2,500	101.840	5.756	2.21	1.1
30-May-2001	5	1-Sep-2006	5.75	2,500	100.160	5.712	2.19	1.3
6-Jun-2001	30	1-Dec-2031	4.00*	350	107.558	3.59	2.86	n.a
13-Jun-2001	2	1-Dec-2003	5.00	3,500	99.959	5.019	2.24	0.5
25-Jul-2001	10	1-Jun-2011	6.00	2,400	102.000	5.730	2.17	0.8
15-Aug-2001	5	1-Sep-2006	5.75	2,500	102.034	5.284	2.23	0.4
29-Aug-2001	2	1-Dec-2003	5.00	3,500	101.099	4.479	2.09	0.8
19-Sep-2001	30	1-Dec-2031	4.00*	300	104.862	3.73	2.91	n.a
10-Oct-2001	30	1-Jun-2033	5.75	2,000	99.863	5.760	2.24	1.5
24-Oct-2001	10	1-Jun-2012	5.25	2,500	99.412	5.324	2.57	0.5
14-Nov-2001	5	1-Sep-2007	4.50	2,500	99.754	4.550	2.25	0.9
28-Nov-2001	2	1-Jun-2004	3.50	3,500	99.538	3.695	2.23	0.9
5-Dec-2001	30	1-Dec-2031	4.00*	350	104.514	3.748	2.38	n.a
16-Jan-2002	30	1-Jun-2033	5.75	2,000	103.343	5.524	2.34	1.1
6-Feb-2002	10	1-Jun-2012	5.25	2,500	98.842	5.397	2.23	1.1
13-Feb-2002	5	1-Sep-2007	4.50	2,500	97.879	4.943	2.26	0.4
6-Mar-2002	2	1-Jun-2004	3.50	3,500	99.232	3.860	2.40	0.5
13-Mar-2002	30	1-Dec-2031	4.00*	350	104.451	3.75	2.85	n.a
Total				**41,150**				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

* Real return bonds.

Source: Department of Finance.

Reference Table X

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2002

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	($ millions)	(%)		($ millions)	(%)
Fixed-coupon					
1-Apr-2002	5,450	8.50	1-Sep-2007	5,000	4.50
1-May-2002	1,662	10.00	1-Oct-2007	524	13.00
1-Jun-2002	5,162	5.75	1-Mar-2008	627	12.75
1-Sep-2002	9,522	5.50	1-Jun-2008	9,200	6.00
1-Dec-2002	5,711	6.00	1-Jun-2008	3,258	10.00
15-Dec-2002	1,073	11.25	1-Oct-2008	449	11.75
1-Feb-2003	1,733	11.75	1-Mar-2009	265	11.50
1-Jun-2003	7,000	5.75	1-Jun-2009	9,400	5.50
1-Jun-2003	6,900	7.25	1-Jun-2009	673	11.00
1-Sep-2003	9,700	5.25	1-Oct-2009	454	10.75
1-Oct-2003	452	9.50	1-Mar-2010	149	9.75
1-Dec-2003	7,000	5.00	1-Jun-2010	10,400	5.50
1-Dec-2003	8,800	7.50	1-Jun-2010	2,474	9.50
1-Feb-2004	1,081	10.25	1-Oct-2010	159	8.75
1-Jun-2004	7,000	3.50	1-Mar-2011	905	9.00
1-Jun-2004	7,900	6.50	1-Jun-2011	15,000	6.00
1-Jun-2004	541	13.50	1-Jun-2011	669	8.50
1-Sep-2004	10,850	5.00	1-Jun-2012	5,000	5.25
1-Oct-2004	296	10.50	15-Mar-2014	2,584	10.25
1-Dec-2004	7,700	9.00	1-Jun-2015	2,106	11.25
1-Mar-2005	716	12.00	31-Dec-2019	27	10.19
1-Sep-2005	11,100	6.00	15-Mar-2021	1,723	10.50
1-Sep-2005	1,065	12.25	1-Jun-2021	3,989	9.75
1-Dec-2005	8,000	8.75	1-Jun-2022	1,633	9.25
1-Mar-2006	335	12.50	1-Jun-2023	8,200	8.00
1-Sep-2006	10,000	5.75	1-Jun-2025	8,900	9.00
1-Oct-2006	804	14.00	1-Jun-2027	9,600	8.00
1-Dec-2006	9,100	7.00	1-Jun-2029	13,900	5.75
1-Mar-2007	261	13.75	1-Jun-2033	4,400	5.75
1-Jun-2007	9,500	7.25	**Total**	**278,082**	

Reference Table X *(cont'd)*
Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2002

Maturity date	Amount	Coupon rate
	($ millions)	(%)
Real return bonds		
1-Dec-2021	5,175	4.25
1-Dec-2026	5,250	4.25
1-Dec-2031	4,400	4.00
Total[1]	**14,825**	

[1] Real return bond figures show gross issue amount only – the consumer price index adjustment is not shown here.

Source: Bank of Canada.

Reference Table XI

Government of Canada Swaps Outstanding as at March 31, 2002

Domestic interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	($ millions)
01-Feb-2004	10.25	50
Total		**50**

Foreign interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	(US$ millions)
19-Nov-2007	4.00	25
05-Nov-2008	5.25	200
05-Nov-2008	5.25	500
05-Nov-2008	5.25	500
Total		**1,225**

Cross-currency swaps of foreign obligations

Maturity date	Notional amount
	(US$ millions)
16-Jul-2003	65
26-Nov-2004	495
26-Nov-2004	341
30-Nov-2004	63
30-Nov-2004	25
22-Dec-2004	76
03-Oct-2007	319
31-Jan-2008	44
Total	**1,428**

Reference Table XI *(cont'd)*
Government of Canada Swaps Outstanding as at March 31, 2002

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Apr-2002	50.00	USD	01-Feb-2004	43.00	EUR
01-May-2002	100.00	USD	01-Feb-2004	44.00	EUR
01-Sep-2002	250.00	USD	01-Feb-2004	45.00	EUR
01-Sep-2002	250.00	EUR	01-Feb-2004	46.00	EUR
01-Sep-2002	250.00	USD	01-Feb-2004	75.00	USD
01-Sep-2002	500.00	USD	01-Feb-2004	100.00	USD
28-Oct-2002	100.00	USD	01-Feb-2004	100.00	USD
15-Dec-2002	51.00	EUR	01-Feb-2004	100.00	USD
15-Dec-2002	51.00	EUR	01-Feb-2004	50.00	USD
15-Dec-2002	350.00	USD	01-Feb-2004	50.00	USD
15-Dec-2002	250.00	USD	01-Feb-2004	50.00	USD
01-Feb-2003	52.00	EUR	30-Mar-2004	100.00	USD
01-Jun-2003	54.00	EUR	01-Jun-2004	77.00	EUR
01-Jun-2003	33.00	EUR	01-Jun-2004	52.00	EUR
01-Jun-2003	75.00	USD	01-Jun-2004	52.00	EUR
01-Jun-2003	50.00	USD	01-Jun-2004	76.00	EUR
01-Sep-2003	53.00	EUR	01-Jun-2004	51.00	EUR
01-Sep-2003	52.00	EUR	01-Jun-2004	51.00	EUR
01-Sep-2003	50.00	USD	01-Jun-2004	52.00	EUR
01-Sep-2003	50.00	USD	01-Jun-2004	53.00	EUR
01-Sep-2003	50.00	USD	01-Jun-2004	54.00	EUR
01-Oct-2003	76.00	EUR	01-Jun-2004	46.00	EUR
01-Oct-2003	106.00	EUR	01-Jun-2004	100.00	USD
01-Oct-2003	65.00	USD	01-Jun-2004	50.00	USD
30-Nov-2003	100.00	USD	01-Jun-2004	100.00	USD
01-Dec-2003	52.00	EUR	01-Jun-2004	50.00	USD
01-Dec-2003	52.00	EUR	01-Jun-2004	50.00	USD
01-Dec-2003	52.00	EUR	01-Sep-2004	52.00	EUR
01-Dec-2003	325.00	USD	01-Sep-2004	49.00	EUR
01-Dec-2003	65.00	USD	01-Sep-2004	44.00	EUR
01-Dec-2003	65.00	USD	01-Sep-2004	43.00	EUR
01-Dec-2003	65.00	USD	01-Oct-2004	108.00	EUR
01-Feb-2004	30.00	EUR	01-Oct-2004	53.00	EUR

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2002

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Oct-2004	51.00	EUR	01-Dec-2005	46.00	EUR
01-Oct-2004	50.00	USD	01-Dec-2005	45.00	EUR
01-Oct-2004	75.00	USD	01-Dec-2005	44.00	EUR
23-Nov-2004	100.00	USD	01-Dec-2005	45.00	EUR
01-Dec-2004	43.00	EUR	01-Dec-2005	45.00	EUR
01-Dec-2004	66.00	EUR	01-Dec-2005	45.00	EUR
01-Mar-2005	250.00	USD	01-Dec-2005	44.00	EUR
01-Mar-2005	44.00	EUR	01-Dec-2005	66.00	EUR
01-Mar-2005	250.00	USD	01-Dec-2005	66.00	EUR
01-Mar-2005	65.00	USD	01-Dec-2005	50.00	USD
01-Sep-2005	47.00	EUR	01-Dec-2005	50.00	USD
01-Sep-2005	47.00	EUR	01-Dec-2005	50.00	USD
01-Sep-2005	28.00	EUR	01-Mar-2006	48.00	EUR
01-Sep-2005	28.00	EUR	01-Mar-2006	48.00	EUR
01-Sep-2005	45.00	EUR	01-Mar-2006	65.00	EUR
01-Sep-2005	66.00	EUR	01-Mar-2006	66.00	EUR
01-Sep-2005	65.00	EUR	01-Mar-2006	50.00	USD
01-Sep-2005	65.00	EUR	01-Sep-2006	43.00	EUR
01-Sep-2005	66.00	EUR	01-Oct-2006	54.00	EUR
01-Sep-2005	100.00	USD	01-Oct-2006	50.00	USD
23-Nov-2005	150.00	USD	01-Oct-2006	50.00	USD
01-Dec-2005	500.00	USD	30-Oct-2006	250.00	USD
01-Dec-2005	49.00	EUR	23-Nov-2006	150.00	USD
01-Dec-2005	49.00	EUR	01-Dec-2006	50.00	EUR
01-Dec-2005	48.00	EUR	01-Dec-2006	44.00	EUR
01-Dec-2005	48.00	EUR	01-Dec-2006	44.00	EUR
01-Dec-2005	45.00	EUR	01-Dec-2006	64.00	EUR
01-Dec-2005	45.00	EUR	01-Dec-2006	66.00	EUR
01-Dec-2005	45.00	EUR	01-Mar-2007	24.00	EUR
01-Dec-2005	64.00	EUR	01-Jun-2007	51.00	EUR
01-Dec-2005	44.00	EUR	01-Jun-2007	51.00	EUR
01-Dec-2005	46.00	EUR	01-Jun-2007	103.00	EUR
01-Dec-2005	46.00	EUR	01-Jun-2007	43.00	EUR

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2002

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Jun-2007	250.00	USD	01-Oct-2008	50.00	USD
01-Jun-2007	250.00	USD	01-Mar-2009	69.00	EUR
01-Jun-2007	250.00	USD	01-Mar-2009	70.00	USD
01-Oct-2007	49.00	EUR	01-Mar-2009	65.00	USD
01-Oct-2007	50.00	EUR	01-Mar-2009	50.00	USD
01-Oct-2007	44.00	EUR	01-Mar-2009	75.00	USD
01-Oct-2007	23.00	EUR	01-Mar-2009	50.00	USD
01-Mar-2008	200.00	USD	01-Mar-2009	50.00	USD
01-Mar-2008	50.00	USD	01-Mar-2009	100.00	USD
01-Mar-2008	63.00	EUR	01-Mar-2009	75.00	USD
01-Mar-2008	45.00	EUR	01-Jun-2009	44.00	EUR
01-Mar-2008	75.00	USD	01-Jun-2009	64.00	EUR
01-Mar-2008	100.00	USD	01-Jun-2009	46.00	EUR
01-Mar-2008	50.00	USD	01-Jun-2009	67.00	EUR
01-Jun-2008	45.00	EUR	01-Jun-2009	66.00	EUR
01-Jun-2008	44.00	EUR	01-Jun-2009	65.00	EUR
01-Jun-2008	45.00	EUR	01-Jun-2009	44.00	EUR
01-Jun-2008	44.00	EUR	01-Jun-2009	66.00	EUR
01-Jun-2008	250.00	USD	01-Jun-2009	50.00	USD
01-Jun-2008	100.00	USD	01-Jun-2009	70.00	USD
01-Jun-2008	100.00	USD	01-Jun-2009	100.00	USD
01-Jun-2008	100.00	USD	01-Jun-2009	50.00	USD
01-Jun-2008	50.00	USD	01-Jun-2009	70.00	USD
01-Jun-2008	100.00	USD	01-Jun-2009	100.00	USD
01-Jun-2008	50.00	USD	01-Jun-2009	65.00	USD
01-Jun-2008	50.00	USD	01-Oct-2009	79.00	EUR
30-Sep-2008	50.00	USD	01-Oct-2009	78.00	EUR
01-Oct-2008	65.00	EUR	01-Oct-2009	70.00	EUR
01-Oct-2008	64.00	EUR	01-Oct-2009	103.00	EUR
01-Oct-2008	44.00	EUR	01-Oct-2009	77.00	EUR
01-Oct-2008	44.00	EUR	01-Oct-2009	50.00	EUR
01-Oct-2008	70.00	USD	01-Oct-2009	44.00	EUR
01-Oct-2008	70.00	USD			

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2002

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Oct-2009	44.00	EUR	01-Jun-2010	45.00	EUR
01-Oct-2009	44.00	EUR	01-Jun-2010	43.00	EUR
01-Oct-2009	43.00	EUR	01-Jun-2010	42.00	EUR
01-Oct-2009	64.00	EUR	01-Jun-2010	44.00	EUR
01-Oct-2009	43.00	EUR	01-Jun-2010	45.00	EUR
01-Oct-2009	44.00	EUR	01-Jun-2010	44.00	EUR
01-Oct-2009	45.00	EUR	01-Jun-2010	46.00	EUR
01-Oct-2009	46.00	EUR	01-Jun-2010	46.00	EUR
01-Oct-2009	46.00	EUR	01-Jun-2010	45.00	EUR
01-Oct-2009	44.00	EUR	01-Jun-2010	45.00	EUR
01-Oct-2009	45.00	EUR	01-Jun-2010	76.00	JPY
01-Oct-2009	65.00	EUR	01-Oct-2010	35.00	EUR
01-Mar-2010	48.00	EUR	01-Oct-2010	63.00	EUR
01-Mar-2010	46.00	EUR	01-Oct-2010	44.00	EUR
01-Mar-2010	46.00	EUR	01-Oct-2010	48.00	EUR
01-Mar-2010	45.00	EUR	01-Oct-2010	45.00	EUR
01-Mar-2010	65.00	EUR	01-Oct-2010	46.00	EUR
01-Jun-2010	46.00	EUR	01-Oct-2010	65.00	EUR
01-Jun-2010	45.00	EUR	01-Oct-2010	65.00	EUR
01-Jun-2010	38.00	EUR	01-Oct-2010	66.00	EUR
01-Jun-2010	29.00	EUR	01-Jun-2011	44.00	EUR
01-Jun-2010	47.00	EUR	01-Jun-2011	45.00	EUR
01-Jun-2010	47.00	EUR	01-Jun-2011	66.00	EUR
01-Jun-2010	45.00	EUR	**Total**	**17,899**	
01-Jun-2010	45.00	EUR			

Note: Numbers may not add due to rounding.

[1] Refers to the coupon of the underlying bond that was swapped.

Source: Department of Finance.

Reference Table XII

Bond Buyback Program – Operations 2001-02

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
April 10, 2001	September 1, 2001	7	280
	Total		**280**
April 18, 2001	March 15, 2014	10.25	62
	June 1, 2015	11.25	4
	March 15, 2021	10.5	34
	June 1, 2021	9.75	123
	June 1, 2022	9.25	26
	Total		**249**
May 2, 2001	March 1, 2008	12.75	34
	October 1, 2008	11.75	55
	March 1, 2009	11.5	11
	October 1, 2009	10.75	55
	March 1, 2010	9.75	37
	October 1, 2010	8.75	11
	March 1, 2011	9	32
	March 15, 2014	10.25	68
	June 1, 2015	11.25	97
	Total		**400**
May 8, 2001	June 1, 2001	4.5	247
	September 1, 2001	7	400
	December 1, 2001	5.25	280
	December 1, 2001	9.75	73
	Total		**1,000**
May 30, 2001	February 1, 2004	10.25	158
	October 1, 2004	10.5	4
	March 1, 2005	12	39
	March 1, 2006	12.5	64
	October 1, 2006	14	53
	October 1, 2007	13	14
	March 1, 2008	12.75	38
	October 1, 2008	11.75	30
	Total		**400**
June 5, 2001	December 1, 2001	5.25	480
	June 1, 2002	5.75	520
	Total		**1,000**
June 13, 2001	May 1, 2002	10	100
	February 1, 2003	11.75	174
	February 1, 2004	10.25	76
	Total		**350**
July 3, 2001	September 1, 2001	7	153
	December 1, 2001	5.25	495
	December 1, 2001	9.75	102
	Total		**750**
July 17, 2001	September 1, 2001	7	750
	Total		**750**
July 25, 2001	March 1, 2009	11.5	84
	October 1, 2009	10.75	29
	October 1, 2010	8.75	9
	March 1, 2011	9	134
	March 15, 2014	10.25	244
	Total		**500**
July 31, 2001	September 1, 2001	7	750
	Total		**750**
August 15, 2001	October 1, 2004	10.5	174
	March 1, 2005	12	142
	March 1, 2006	12.5	76
	October 1, 2007	13	8
	Total		**400**

Reference Table XII *(cont'd)*

Bond Buyback Program – Operations 2001-02

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
August 29, 2001	May 1, 2002	10	68
	December 15, 2002	11.25	120
	February 1, 2003	11.75	35
	October 1, 2003	9.5	62
	February 1, 2004	10.25	100
	October 1, 2004	10.5	60
	March 1, 2005	12	55
	Total		**500**
September 25, 2001	December 1, 2001	9.75	750
	Total		**750**
October 9, 2001	December 1, 2001	9.75	700
	September 1, 2002	5.5	50
	Total		**750**
October 10, 2001	March 15, 2021	10.5	40
	June 1, 2021	9.75	207
	June 1, 2022	9.25	253
	Total		**500**
October 23, 2001	December 1, 2001	5.25	750
	Total		**750**
October 24, 2001	March 1, 2007	13.75	26
	October 1, 2007	13	21
	March 1, 2008	12.75	26
	October 1, 2008	11.75	18
	March 1, 2009	11.5	35
	October 1, 2009	10.75	125
	March 1, 2010	9.75	114
	October 1, 2010	8.75	5
	March 1, 2011	9	27
	Total		**397**
November 6, 2001	December 1, 2001	5.25	150
	December 1, 2001	9.75	29
	Total		**179**
November 14, 2001	February 1, 2004	10.25	24
	March 1, 2005	12	3
	March 1, 2006	12.5	30
	October 1, 2006	14	20
	October 1, 2007	13	13
	March 1, 2008	12.75	25
	October 1, 2008	11.75	21
	March 1, 2009	11.5	5
	October 1, 2009	10.75	11
	Total		**153**
November 28, 2001	December 15, 2002	11.25	29
	February 1, 2003	11.75	152
	February 1, 2004	10.25	92
	October 1, 2004	10.5	34
	March 1, 2005	12	1
	March 1, 2006	12.5	4
	Total		**311**
January 15, 2002	June 1, 2002	5.75	406
	September 1, 2002	5.5	70
	December 1, 2002	6	24
	Total		**500**
January 16, 2002	March 15, 2014	10.25	139
	June 1, 2015	11.25	32
	June 1, 2021	9.75	116
	June 1, 2022	9.25	100
	Total		386

Reference Table XII *(cont'd)*
Bond Buyback Program – Operations 2001-02

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
January 29, 2002	June 1, 2002	5.75	355
	September 1, 2002	5.5	40
	December 1, 2002	6	355
	Total		**750**
February 6, 2002	October 1, 2007	13	8
	October 1, 2008	11.75	47
	October 1, 2009	10.75	72
	March 1, 2011	9	158
	March 15, 2014	10.25	28
	June 1, 2015	11.25	88
	Total		**400**
February 12, 2002	June 1, 2002	5.75	662
	September 1, 2002	5.5	88
	Total		**750**
February 13, 2002	March 1, 2005	12	36
	March 1, 2006	12.5	39
	October 1, 2006	14	35
	October 1, 2007	13	7
	October 1, 2008	11.75	7
	October 1, 2009	10.75	10
	Total		**133**
February 26, 2002	September 1, 2002	5.5	430
	December 1, 2002	6	105
	Total		**535**
March 6, 2002	October 1, 2003	9.5	45
	February 1, 2004	10.25	90
	October 1, 2004	10.5	14
	March 1, 2005	12	5
	October 1, 2006	14	24
	Total		**178**
March 12, 2002	June 1, 2002	5.75	95
	December 1, 2002	6	905
	Total		**1,000**
March 26, 2002	December 1, 2002	6	1,000
	Total		**1,000**
Total buyback program for 2001-2002			**16,752**

Source: Department of Finance.

Reference Table XIII

Canada Savings Bonds and Canada Premium Bonds, Fiscal 1983-84 to Fiscal 2001-02

Fiscal year	Gross sales	Net change	Outstanding at fiscal year end
		($ millions)	
1983-84	11,584	5,650	38,403
1984-85	12,743	3,764	42,167
1985-86	15,107	2,440	44,607
1986-87	9,191	-22	44,585
1987-88	17,450	8,921	53,506
1988-89	14,962	-5,456	48,050
1989-90	9,338	-6,813	41,237
1990-91	6,720	-6,500	34,737
1991-92	9,588	1,151	35,888
1992-93	9,235	-1,172	34,716
1993-94	5,364	-3,089	31,627
1994-95	7,506	-96	31,531
1995-96	4,612	10	31,541
1996-97	5,747	2,050	33,591
1997-98	4,951	-2,796	30,795
1998-99	4,844	-2,187	28,608
1999-00	2,669	-1,510	27,098
2000-01	3,188	-531	26,567
2001-02	2,829	-2,283	24,284

Note: Figures are in accordance with Bank of Canada audited reports, which may vary from Public Accounts reports due to differences in classification.

Source: Bank of Canada.

Reference Table XIV

Crown Corporation Borrowings as at March 31, 2002

Borrowings from the market

Corporation	1994	1995	1996	1997	1998	1999	2000	2001	2002
				($ millions)					
Export Development Corporation	7,793	7,515	7,673	7,820	10,077	12,967	16,888	18,406	20,481
Canadian Wheat Board[1]	7,283	7,321	6,377	6,474	6,698	6,786	542	425	397
Business Development Bank of Canada	2,602	2,723	3,045	3,371	3,839	4,223	4,723	5,102	5,726
Farm Credit Corporation	863	990	1,582	1,926	3,026	4,317	5,083	5,695	7,096
Canadian National[1]	2,249	2,331	–	–	–	–	–	-	–
Canada Mortgage and Housing Corporation	1,573	3,630	5,906	7,866	9,934	10,633	10,801	11,672	11,372
Canada Development Investment Corporation	473	–	–	–	–	–	–	–	–
Petro-Canada Ltd.	501	504	490	432	443	471	338	–	–
Petro-Canada[1]	–	–	–	–	–	–	–	–	–
Canada Ports Corporation	–	–	–	–	3	79	69	–	–
Other	239	235	297	226	258	222	196	100	103
Total	**23,576**	**25,249**	**25,370**	**28,115**	**34,278**	**39,698**	**38,640**	**41,400**	**45,175**

[1] This corporation is no longer a Crown corporation.

Source: *Public Accounts of Canada*.

Borrowings from the Consolidated Revenue Fund

Corporation	1994	1995	1996	1997	1998	1999	2000	2001	2002
				($ millions)					
Canada Mortgage and Housing Corporation	8,075	7,835	7,263	6,938	6,708	6,298	6,152	5,852	5,696
Canada Deposit Insurance Corporation	3,151	2,160	1,627	855	395	–	–	–	–
Farm Credit Corporation	2,488	2,524	2,310	2,507	1,877	1,041	805	578	–
Other	415	307	233	204	179	551	77	84	104
Total	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**	**7,890**	**7,034**	**6,514**	**5,800**

Note: Figures do not include "allowance for valuation."

Source: Public Works and Government Services Canada data.

Debt Management Report

2002-2003

Canada

DEBT MANAGEMENT REPORT

2002-2003

Department of Finance Canada   Ministère des Finances Canada

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Table of Contents

Foreword by the Minister of Finance

I am pleased to table before Parliament the Government of Canada's *Debt Management Report* for fiscal year 2002–03. It provides the accountability Canadians deserve, with comprehensive information about how Canada's debt is managed.

During the past fiscal year the Government of Canada recorded its sixth consecutive budget surplus, a feat not achieved in half a century. According to the Organisation for Economic Co-operation and Development (OECD), Canada will be the only G-7 nation in surplus this year. These ongoing surpluses have enabled us to reduce our federal debt by more than $52 billion since we balanced the budget in 1997–98.

Today Canada's debt-to-GDP (gross domestic product) ratio stands at 44.2 per cent compared to its peak of 68.4 per cent in 1995–96. An additional benefit is a $3-billion reduction, every year, in interest service charges. These savings are now being invested in the priorities of Canadians, while enabling us to better withstand the fiscal damage caused by unforeseen events both inside and outside our borders.

Canada has made remarkable fiscal progress. Yet, at 21 cents of every revenue dollar received by the Government, interest charges remain the largest single expense in our budget. Obviously, we must continue to reduce this debt obligation even further. This government will not waver from its commitment to manage the nation's finances prudently and in the long-term interest of its citizens.

Sound financial management is an integral part of our strategy to create the economic conditions of a better standard of living and a better quality of life, conditions that will allow Canadians to excel. It is an obligation that we will honour, to build the Canada we want.

The Honourable Ralph Goodale, P.C., M.P.
Minister of Finance
Ottawa, February 2004

Purpose of this Publication

The *Debt Management Report* provides a detailed account of the Government of Canada's borrowing and cash management operations over the fiscal year from April 1, 2002 to March 31, 2003.

It provides a comprehensive account of the context within which the debt is managed, its composition and changes during the year, and actions taken on strategic initiatives set out in the 2002–03 *Debt Management Strategy*, published in March 2002. A set of reference tables containing statistics on the operation of debt programs is also provided.

The information contained in this report is designed for market participants, to ensure transparency and public accountability in the Government's borrowing and cash management activities. The *Debt Management Strategy* and the *Debt Management Report* are tabled annually in Parliament and are available on the Department of Finance Web site at www.fin.gc.ca.

Additions to the Debt Management Report

Two sections have been added to this year's report.

- A summary of planned initiatives, their rationale, actions taken and underlying debt strategy themes for the year is found on page 12.
- A compilation of debt management indicators related to debt, cash and reserves management activities, which is intended to enhance public understanding and accountability, is found on page 41.

Highlights of the 2002–2003 Debt Strategy

Summary

In 2002–03 the Government of Canada continued to reduce its level of indebtedness. On a full accrual basis of accounting, the federal debt was reduced to $510.6 billion, down $52.3 billion from its peak in 1996–97. The 2002–03 budgetary surplus of $7.0 billion was used to reduce interest-bearing debt by $2.1 billion, lower other liabilities by $2.1 billion, and increase financial and non-financial assets by $2.8 billion. Debt-servicing charges were down $2.4 billion from fiscal year 2001–02, as a result of the decline in interest-bearing debt and a 20-basis-point reduction in the average interest rate on that debt. The cumulative reduction in indebtedness since 1996–97 has reduced debt charges by $3 billion, on average, each year. Lower debt-servicing charges benefit Canadian taxpayers.

The advent of a period of federal budgetary surpluses in the 1990s ushered in a new area in federal debt management—one focused on maintaining a well-functioning market for debt, or fixed-income securities, in an environment of declining borrowing needs. Over the past several years the majority of adjustments to government borrowing programs have been in this domain, and this focus continued in 2002–03.

A key objective of federal debt management is to raise stable, low-cost funding for the Government. To achieve this, the Government has established a framework for managing the debt, which includes principles that guide funding activities (see the box on the next page). In accordance with that framework, the Government lays out its annual plan for managing the outstanding stock of debt in the *Debt Management Strategy* publication prior to each fiscal year. Plans for the management of government cash balances and foreign exchange reserves are also included in the publication. The debt strategy for fiscal year 2002–03 was tabled in Parliament and published by the Department of Finance in March 2002 (www.fin.gc.ca/toce/2002/dms02_e.html).

This document, the *Debt Management Report*, reports on government debt, cash and reserves operations that occurred over the 2002–03 fiscal year and provides detailed information on the composition of the outstanding debt. Following the Government of Canada's shift to full accrual accounting, this report clarifies certain terms used to describe the debt, including "gross public debt," "market debt," "non-market debt," "net public debt," and "federal debt" or "accumulated deficit."

By highlighting the progress of plans and initiatives set out in the debt strategy, this report is of use to market participants and ensures public accountability. All of the 2002–03 objectives for the management of the Government of Canada's debt, cash and reserves were achieved over the course of the year. In addition, complementary initiatives were identified and acted upon based on consultations with market participants. The objectives and actions taken in 2002–03 are reviewed in more detail in the table on page 12.

New to the report this year is a section on the key themes underlying the debt strategy in 2002–03. The two key themes are supporting a well-functioning Government of Canada securities market and managing risk.

A **well-functioning wholesale market in Government of Canada securities** benefits the Government as well as a wide range of market participants. For the Government as a debt issuer, a well-functioning market attracts investors and ensures that funding costs are kept low. For market participants, a liquid and active secondary market in government debt provides credit-risk-free assets for investment portfolios, a pricing benchmark for other debt issues and swaps, and a primary tool for hedging risk.

Debt Strategy Framework

Fundamental Objective:

Raise stable, low-cost funding for the Government of Canada.

Strategic Objectives:

- Maintain a prudent debt structure.
- Maintain and enhance a well-functioning market for Government of Canada securities.
- Maintain a diversified investor base.

Operational Principles:

- **Prudence:** The structure of the federal debt is managed to protect the Government's fiscal position from unexpected increases in interest rates and to limit refinancing needs. All funding for domestic operational needs is raised in Canadian dollars, while risks arising in the management of the foreign reserves are immunized by matching as closely as possible the currency and duration of assets and liabilities.
- **Transparency, liquidity and regularity:** The design and implementation of funding and investment programs is based on these principles to attract broad investor interest and thereby lower costs.
- **Diversification:** A variety of sources of funds and borrowing maturities are used to take advantage of the range of investor types and demand.
- **Market integrity:** The Government works with market participants and regulators to maintain high standards of conduct to ensure the attractiveness to investors of the Government of Canada securities market.
- **Consultation:** Input from market participants is sought before major adjustments are made to federal debt and cash management programs to limit the risk of market disruption.
- **Best practices:** Operational frameworks and practices are based on the best practices of other comparable sovereign borrowers and relevant practices in the private sector.

The Government's efforts to maintain and enhance the market for its securities have targeted both the issuance of bonds and Treasury bills through auctions, and the liquidity and efficiency of the secondary market. Program initiatives of note in recent years include increasing the target sizes for benchmark 2-, 5-, 10- and 30-year bonds and the size of new bond issues, and implementing bond buybacks. The Department of Finance and the Bank of Canada have also worked with market participants and securities regulators to develop a framework to enhance the transparency and integrity of the fixed-income market. In 2002–03 these areas continued to be the primary focus of government initiatives.

The debt, cash and reserves management operations of the Government of Canada engender exposure to various forms of financial risk. The primary focus of **risk management** in the context of federal debt strategy has always been the management of the structure of the domestic debt, which, due to the impact of changing interest rates, is by far the most significant form of financial risk to which the Government is exposed.

In recent years, in addition to focusing on the maintenance of a prudent debt structure, the Government has introduced a comprehensive risk management framework for identifying and managing all forms of treasury risk, in particular the market, credit, operational and legal risks related to the financing and investment of its foreign exchange reserves and the investment of its Canadian-dollar cash balances.

The Government's risk management policies, supported by the creation of a special risk unit at the Bank of Canada, call for prudent management of treasury risks based on best practices. Risk tolerances are low, calling for market risk to be immunized to the greatest extent possible and the maintenance of high credit quality and portfolio diversification standards.

Also new to this year's report is a section describing commonly used indicators of a well-functioning securities market. These include the degree to which auctions in the primary market are well bid and the level of liquidity and trading in the secondary market. While there are a number of factors that affect these indicators, debt managers follow these measures when examining the Government's debt management activities.

Finally, an annex to the report describes the analytical tools and considerations that the Government uses to determine its target debt structure. One of the key indicators characterizing the composition of the debt is how much of the debt structure is exposed to interest rate variations. The annex describes the techniques the Government uses to analyze the exposure of the debt structure to fluctuations in interest rates, as well as its decision in the 2003 budget to lower the fixed-rate share target of the debt from two-thirds to 60 per cent over a five-year period.

Debt Strategy Plan and Actions Taken

	Plan (including initiatives identified through mid-year consultations)	Purpose	Actions Taken
Debt Structure	Maintain two-thirds of total interest-bearing debt in fixed-rate form.	Keep debt costs low and stable.	The fixed ratio was maintained within a band of 3 per cent around the 2/3 target.
Domestic Debt Programs	Maintain bond and Treasury bill program sizes in line with the prior year.	Provide liquidity to maintain a well-functioning market.	The gross bond program and stock of Treasury bills were roughly in line with the prior year.
	Maintain 2-, 5-, 10- and 30-year benchmark bond issue sizes.	Provide liquidity to maintain a well-functioning market.	Benchmark bond issue sizes were maintained, with the exception of a 2-year issue (see below).
	Limit the total amount of bonds maturing on any maturity date.	Maintain a balanced debt maturity structure.	The September 2002 2-year auction was reduced by $500 million compared to prior 2-year bond issues, as it was fungible with an existing large outstanding bond.
	Expand the basket of bonds eligible for buyback operations.	Promote participation in buybacks and sustain the size of new bond issues in the context of declining borrowing needs.	The basket was expanded to include some old benchmark bonds and their fungibles.
	Continue and increase the size of the pilot program of buybacks on a switch basis.	Promote participation in buybacks and sustain the size of new bond issues.	Switch buybacks were expanded to all maturities (2-, 5-, 10- and 30-year sectors) and the program increased in size from $400 million to $5.9 billion.

Debt Strategy Plan and Actions Taken *(cont'd)*

	Plan (including initiatives identified through mid-year consultations)	Purpose	Actions Taken
Domestic Debt Programs *(cont'd)*	Reduce the targeted turnaround time for publication of the results of Government of Canada securities operations.	Reduce market risk for participants and encourage broader participation in auctions.	On November 25, 2002, turnaround times were reduced from 15 minutes to 10 minutes for auctions and from 30 minutes to 15 minutes for buyback operations.
	Adjust the timing of buyback operations.	Reduce market risk for participants, accommodate participants' preferences and encourage broader participation.	On November 25, 2002, the time of regular bond buyback operations was changed from 1:15 p.m. to 1:00 p.m. On September 25, 2002, the time of switch operations was changed from 12:30 p.m. to 10:30 a.m.
	Establish a lower limit on the buyback of older benchmarks.	Ensure liquidity is maintained in actively traded outstanding bonds.	Repurchases of older benchmarks are now stopped when the remaining outstanding amount for each maturity reaches $6 billion.
Cash Management	Continue and expand the pilot Cash Management Bond Buyback program.	Reduce the peak levels of government cash balances and reduce variability in Treasury bill auctions.	Operations were held regularly throughout the year and offers to repurchase maturing bonds were extended to include those maturing in up to 18 months.
	Implement a new framework for the management of cash balances.	Reduce the risk of counterparty failure and broaden access.	In September 2002 the new collateral-based framework was successfully launched.

Debt Strategy Plan and Actions Taken *(cont'd)*

	Plan (including initiatives identified through mid-year consultations)	Purpose	Actions Taken
Reserves Management	Maintain a prudent level of international reserves, in line with comparable sovereigns.	Provide a source of foreign currency liquidity and promote orderly conditions in the foreign exchange market for the Canadian dollar.	International reserves increased by US$1.9 billion to US$35.9 billion as at March 31, 2003, largely due to changes in market values.
	Implement a collateral management framework for swap credit exposures.	Limit the risk of loss arising from the downgrade or failure of a swap counterparty.	The collateral management framework was implemented in April 2002.
	Develop and implement a US-dollar repo program.	Reduce the amount of uncollateralized commercial deposits.	The repo program was developed in 2002 and inaugurated in April 2003.
	Close the gap between foreign currency assets and liabilities.	Immunize against currency and interest risks.	In 2002 the Government continued its efforts to close the gap, which was closed in 2003.
	Review the investment guidelines governing the management of reserves.	Further diversify Exchange Fund Account investments and bring the guidelines in line with investment practices of a number of other OECD sovereigns.	In the fall of 2002 the Government amended its guidelines to allow a limited amount of securities of A-rated sovereigns to be held within prudent limits.
	Review the credit guidelines pertaining to financial institution counterparties for the management of reserves.	Further diversify credit risk across financial institution counterparties.	The credit risk guidelines were modified in 2002 to accept A-rated financial institutions as eligible counterparties for swaps, forwards and deposits.

Debt Strategy Plan and Actions Taken *(cont'd)*

	Plan (including initiatives identified through mid-year consultations)	Purpose	Actions Taken
Reserves Management *(cont'd)*	Publicly disclose the investment and credit guidelines.	Increase the transparency of the Government's investment and credit guidelines governing the management of reserves.	The guidelines were published in the *2002 Annual Report to Parliament on the Operations of the Exchange Fund Account.*[1]
	Renew the US$6-billion standby line of credit with international banks.	Provide a potential source of supplementary liquidity for the Government. The existing standby credit agreement has been in place since June 23, 1978. The facility has not been used since 1986.	The standby credit facility with international banks was successfully renegotiated in 2002. The maturity date was extended from 2003 to 2007. No other changes were made to the terms of the facility.

[1] Available on the Department of Finance Web site at www.fin.gc.ca.

Part I: Debt Management Context

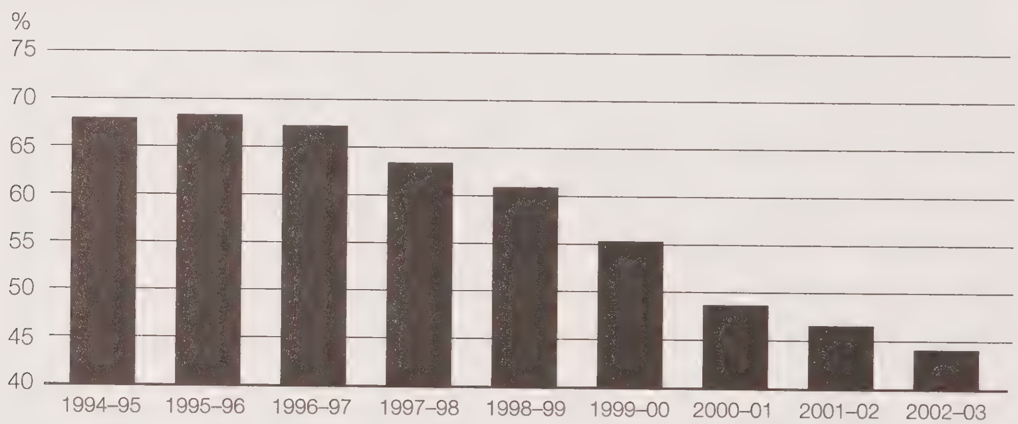
The Fiscal Environment

Budgetary Environment

Canada has experienced a remarkable turnaround in its fiscal position in recent years: the Government has recorded six consecutive budget surpluses; the federal debt has been reduced by $52.3 billion since 1997–98; the federal debt-to-GDP ratio has fallen almost 25 percentage points from its peak of 68.4 per cent in 1995–96 to 44.2 per cent in 2002–03; and fiscal and monetary policy credibility has contributed to lower interest rates.

In 2002–03 the Government recorded a budgetary surplus of $7.0 billion, and the federal debt-to-GDP ratio declined by 2.5 percentage points. This is the seventh consecutive year in which the debt-to-GDP ratio has declined, and it is at its lowest level since 1984–85 (see Chart 1). For detailed information, see the *Annual Financial Report of the Government of Canada* (fiscal year 2002–03) at www.fin.gc.ca/toce/2003/afr_e.html.

Chart 1
Federal Debt-to-GDP Ratio



Source: Department of Finance.

Financial Requirement/Source

The budgetary balance is the most comprehensive measure of the Government of Canada's fiscal results. It is presented on a full accrual basis of accounting, recording government assets and liabilities when they are receivable or incurred, regardless of when the cash is received or paid. In addition, the budgetary balance includes only those activities over which the Government has legislative control.

Note to Readers

The financial statements for 2002–03 are presented on the full accrual basis of accounting, which replaces the modified accrual standard that had been used since the mid-1980s. Prior to the shift to full accrual accounting, there was no distinction between net debt and the accumulated deficit, or federal debt, so these terms were used interchangeably.

Under full accrual accounting, this is no longer the case. Net debt is the Government's net liabilities excluding the value of its non-financial assets. Non-financial assets include tangible capital assets, inventories and prepaid expenses. The accumulated deficit takes into account the value of non-financial assets. The two indicators now represent different measures of the Government's financial position. The federal debt will now represent the accumulation of surpluses and deficits in the past and is the key measure of debt.

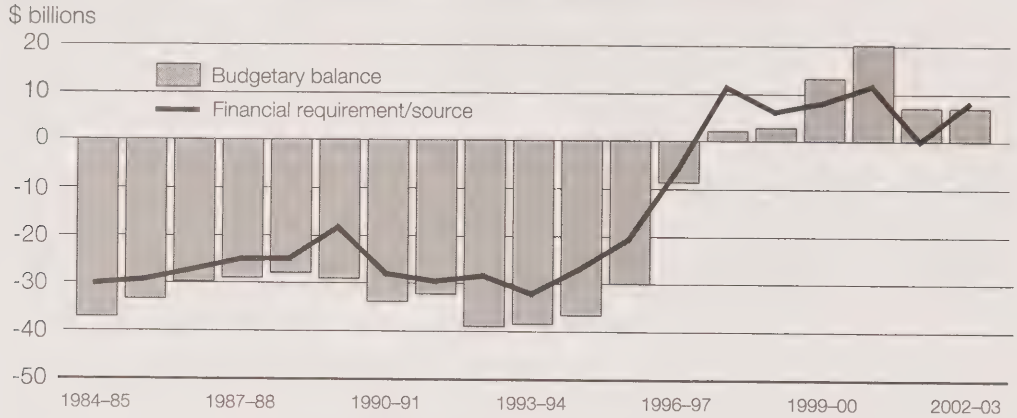
In contrast, the financial requirement/source measures the difference between cash coming in to the Government and cash going out. It differs from the budgetary balance in that it includes transactions in loans, investments and advances, federal employees' pension accounts, other employee and veteran future benefit plans, other specified purpose accounts, foreign exchange activities, changes in other financial assets, liabilities and non-financial assets. These activities are included as part of non-budgetary transactions. The conversion from full accrual to cash accounting is also reflected in non-budgetary transactions.

The budgetary surplus of $7.0 billion and net source of funds from non-budgetary transactions of $0.6 billion produced a financial source of $7.6 billion. This compares to a financial requirement of $0.3 billion in 2001–02 and sources of $11.3 billion in 2000–01 and $7.8 billion in 1999–2000.

In this environment of financial sources, one of the key goals of federal debt management in recent years has been to maintain a liquid and well-functioning market for Government of Canada securities, in particular the domestic Treasury bill and bond programs that form the benchmarks for the Canadian fixed-income market. In 2002–03 both the Treasury bill and bond programs were maintained at levels roughly in line with those of the previous year.

With the shift to full accrual accounting, a number of classification changes have been incorporated, with foreign exchange activities now part of non-budgetary transactions. Consequently, the Government has now recorded a financial source in five of the past six years (see Chart 2). The financial source in 2002–03 was used to increase cash balances by $5.1 billion and to reduce market debt by $2.5 billion.

Chart 2
Budgetary Balance and Financial Requirement/Source

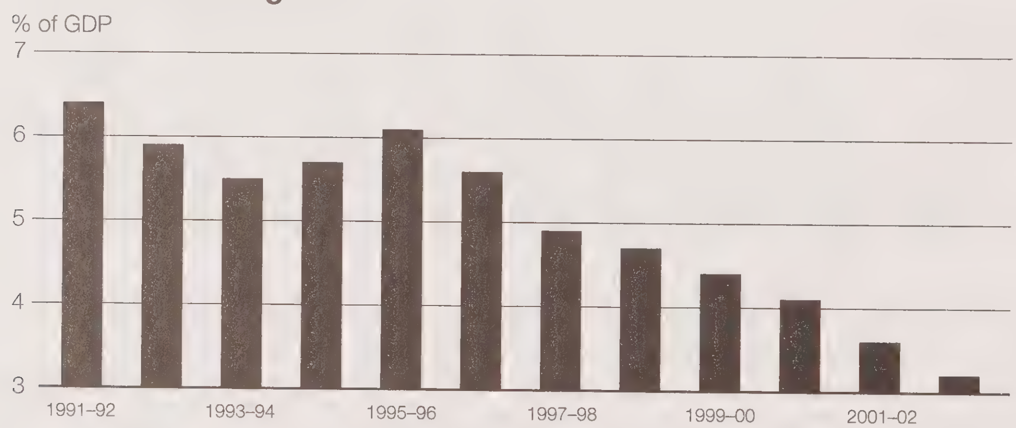


Sources: *Public Accounts of Canada* and Statistics Canada.

Public Debt Costs

In 2002–03 the Government spent 21 cents of every dollar of revenue to pay the interest on the public debt, down from a peak of almost 39 cents in 1990–91. Public debt charges as a percentage of GDP declined to 3.2 per cent in 2002–03 from 3.6 per cent in 2001–02 (see Chart 3).

Chart 3
Public Debt Charges



Source: *Public Accounts of Canada.*

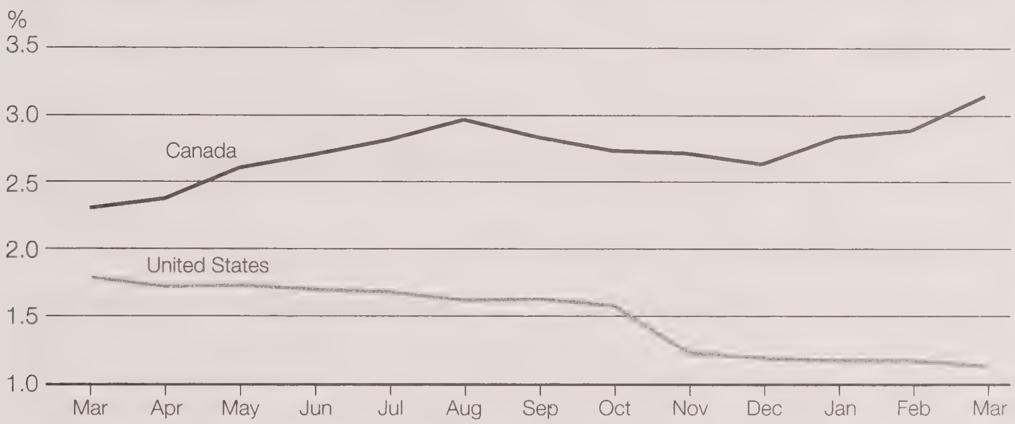
Debt-servicing costs arise from market and non-market debt. Interest rates on market debt are set at the time bonds and Treasury bills are issued and depend on the maturity of the borrowing. The interest rates on interest-bearing non-market debt are based on a 20-year rate imputed from market rates. In 2002–03 the cost of both types of long-term debt benefited from declining long-term interest rate movements over the year (described in the following section) and the decline in

the level of interest-bearing debt. The average interest rate paid on the public debt declined from 6.4 per cent in 2001–02 to 6.2 per cent in 2002–03, while the stock of debt declined by $2.1 billion in 2002–03.

Interest Rate Developments in 2002–03

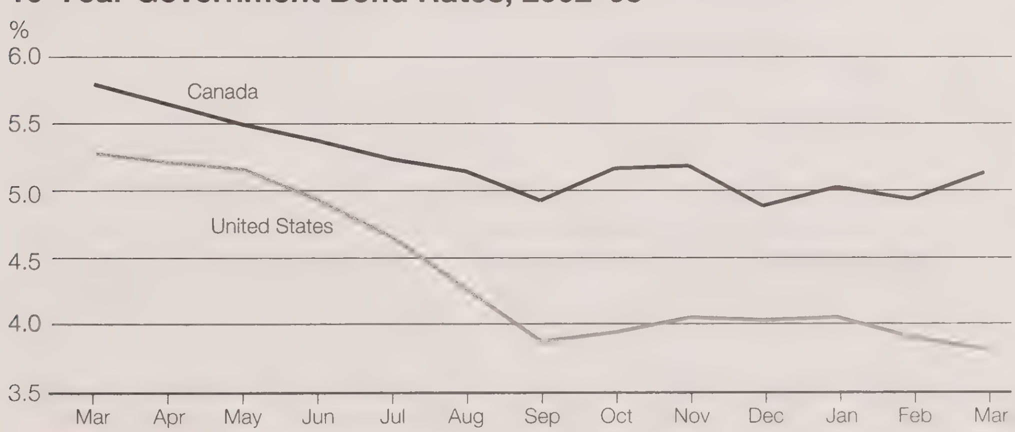
The Bank of Canada tightened monetary policy four times in 2002–03, increasing the overnight rate from 2 to 3 per cent. Three-month Treasury bill yields shifted upwards over the year, from 2.37 to 3.14 per cent (see Chart 4), while longer-term rates fell over the year, from 5.79 to 5.08 per cent (71 basis points) at the 10-year maturity and from 5.98 to 5.55 per cent (43 basis points) at the 30-year maturity (see Charts 5 and 6). Overall, the yield curve flattened at year-end compared to the previous year (see Chart 7).

Chart 4
3-Month Treasury Bill Rates, 2002–03



Sources: Bank of Canada and Federal Reserve Board.

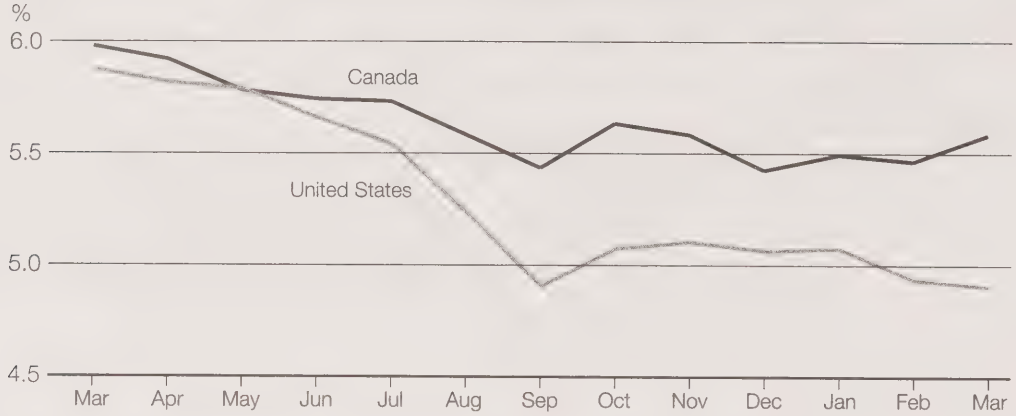
Chart 5
10-Year Government Bond Rates, 2002–03



Sources: Bank of Canada and Federal Reserve Board.

Chart 6

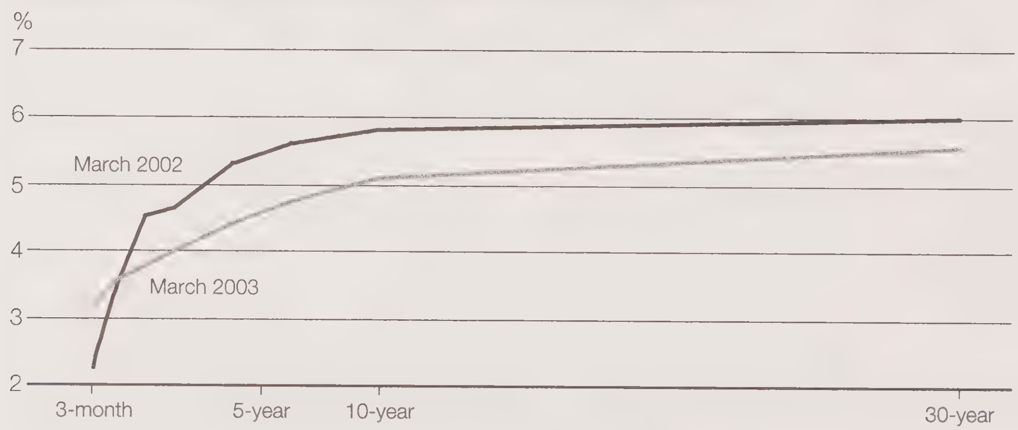
Long-Term Government Bond Rates, 2002–03



Sources: Bank of Canada and Federal Reserve Board.

Chart 7

Canada Yield Curve, March 2002 and March 2003



Source: Bank of Canada.

Composition of the Federal Debt

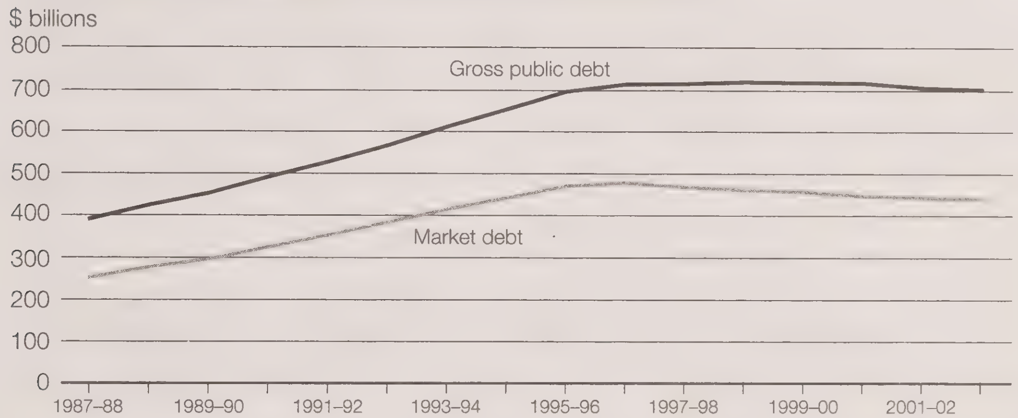
Gross Public Debt

Gross public debt is made up of two major components: market debt and non-market debt. Gross public debt at the end of March 2003 totalled $700.1 billion, down $4.2 billion from the previous year and $17.6 billion from its peak of $717.7 billion on March 31, 1999 (see Chart 8).

Market Debt

Market debt is the portion of gross debt that is funded in the capital markets and strategically managed by the Government. (Foreign currency debt is issued on an opportunistic basis, while Canada Pension Plan [CPP] debt is not funded in markets but is based on market rates.) Market debt consists of marketable bonds, Treasury bills, foreign currency denominated bonds and bills, retail debt and bonds held by the CPP. At March 31, 2003, market debt outstanding was $439.8 billion, down $2.5 billion from the previous year (see Chart 8).

Chart 8
Evolution of Gross Public Debt and Market Debt



Source: *Public Accounts of Canada.*

Non-Market Debt

Non-market debt comprises liabilities held by the Government outside capital markets. This includes money owed to public sector pensions, the CPP and employees and veterans for future benefits, as well as other liabilities, accounts payable and accrued liabilities and allowances. In 2002–03 non-market debt amounted to $260.4 billion, down $1.7 billion from 2001–02.

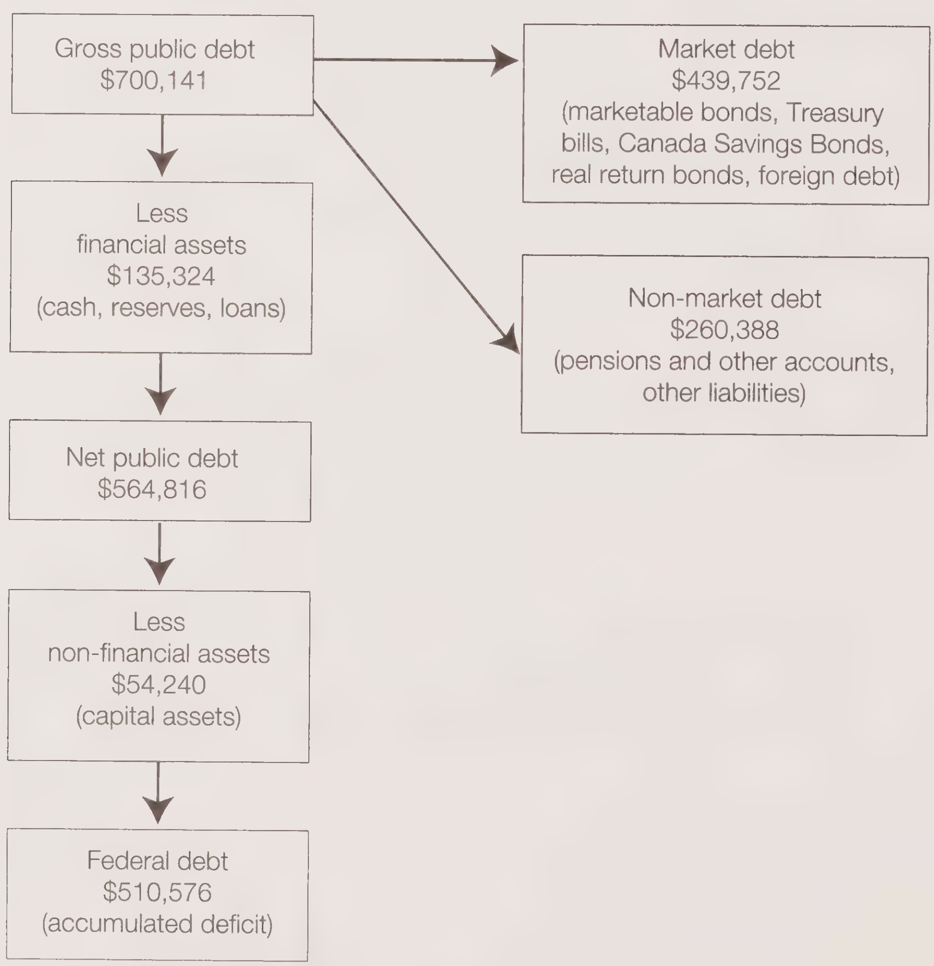
Net Public Debt

Net public debt is gross public debt minus financial assets. Financial assets include cash, foreign exchange accounts and loans. Net public debt declined by $6.1 billion, from $570.9 billion in 2001–02 to $564.8 billion in 2002–03. The Government's financial assets increased by $1.9 billion to $135.3 billion, as the decrease in foreign exchange reserves was more than offset by increases in the Government's cash balances and accounts receivable and in its loans, investments and advances.

Federal Debt

Federal debt, or the accumulated deficit, is net public debt minus non-financial assets. Non-financial assets include tangible capital assets, inventories and prepaid expenses. Federal debt declined by $7.0 billion, from $517.5 billion in 2001–02 to $510.6 billion in 2002–03. The Government's non-financial assets increased by $0.9 billion to $54.2 billion, as an increase in tangible capital assets was offset somewhat by decreases in inventories and prepaid expenses.

Total Public Debt as at March 31, 2003
($ millions)



Source: *Public Accounts of Canada.*

Composition of the Market Debt

The Government of Canada has two types of market debt: domestic debt, which is denominated in Canadian dollars, and foreign currency debt. The Government borrows in Canadian dollars using two types of funding: wholesale and retail. Wholesale funding is conducted through issuance of marketable securities, which include nominal bonds, real return bonds and Treasury bills. These securities are sold via auctions to Government of Canada securities distributors[2] and end-investors. Retail funding is raised through sales of retail bonds to individuals who are Canadian residents.

Funds raised in Canadian dollars are used primarily to meet the Government's operational requirements. See www.fin.gc.ca/invest/debt-e.html for a detailed description of the Government of Canada's market debt instruments. A small proportion of Canadian-dollar wholesale debt is swapped to foreign currencies to fund the Government's foreign exchange reserves. The Government also borrows in foreign currencies for the reserves, which are held in the Exchange Fund Account. The Exchange Fund Account provides a source of foreign currency liquidity and is used to promote orderly conditions in the foreign exchange market for the Canadian dollar. Details on the operations of the Exchange Fund Account can be found in the *2002 Annual Report to Parliament on the Operations of the Exchange Fund Account* at www.fin.gc.ca/toce/2003/efa2002_e.html.

In 2002–03 debt issuance and stock levels (see Table 1) were in accordance with the plans set out in the 2002–03 *Debt Management Strategy* at the beginning of the fiscal year.

Domestic Debt Programs

Fixed-Coupon Marketable Bonds

As planned, gross bond program issuance was maintained in line with 2001–02: gross issuance totalled $42.3 billion in 2002–03 versus $40 billion in 2001–02. Also as planned, bond buyback programs were conducted on a larger scale than in 2001–02.

The gross issuance of bonds of $42.3 billion consisted of $13.9 billion in 2-year bonds, $11 billion in 5-year bonds, $12.6 billion in 10-year bonds and $4.8 billion in 30-year bonds (see Reference Table IX for more information on bond auctions). The majority of gross issuance, $36.4 billion, was through new bond issuance while a smaller portion, $5.9 billion, was issued through the pilot buyback program on a switch basis.

[2] The names of government securities distributors and primary dealers can be found at www.bankofcanada.ca/en/auct.htm. Details related to the responsibilities and performance requirements of government securities distributors are described in "Terms of Participation in Auctions for Government Securities Distributors."

Bond buyback operations totalled $12.1 billion, consisting of $3.2 billion in 2- and 5-year bonds, $3.3 billion in 10-year bonds, and $2.3 billion in 30-year bonds (see Reference Table XII for more information on buyback operations). The repurchase of old bonds on a cash basis accounted for $7.1 billion of the buyback operations. Under the pilot program of buyback on a switch basis, the Government repurchased $5 billion of old bonds and issued $5.9 billion of new bonds.

During fiscal year 2002–03, $30.3 billion of bonds matured. Net new issuance of fixed-coupon marketable bonds during the year, taking into account buybacks and maturities, declined by $7.9 billion (gross issuance less repurchases and less maturing issues), bringing the stock of outstanding marketable bonds down to $269.1 billion as at March 31, 2003.

Table 1
Change in Composition of Federal Market Debt, 2002–03

	April 1, 2002 Outstanding	New issues[a]	Maturing[a]	Repurchase	March 31, 2003 Outstanding[a]	Change
			($ billions)			
Domestic debt						
Fixed-coupon marketable bonds	277.0	42.3	30.3	19.9[d]	269.1	-7.9
Real return bonds	16.8	2.3	–	–	19.1	2.3
Treasury bills[b]	94.0	236.8	226.4		104.4	10.4
Retail debt	24.0	2.7	4.1	–	22.6	-1.4
Total domestic debt	411.8				415.2	3.4
Foreign currency debt						
Canada bills	3.4	16.6	17.3	–	2.6	-0.8
Foreign bonds[c]	19.3	0.4	5.7	–	14.0	-5.3
Canada notes	1.2	–	0.0	–	1.2	0.0
Euro Medium-Term Notes	3.2	0.2	0.1	–	3.3	0.1
Total foreign debt	27.1				21.1	-6.0
CPP bonds and notes	3.4	–	0.0	–	3.4	0.0
Total market debt	442.3				439.8	-2.5

Note: As at March 31, 2003, the total amount of interest rate and cross-currency swaps outstanding stood at USD 20.2 billion (see Reference Table XI). Cross-currency swaps convert C$ denominated government debt into foreign currency obligations for the purpose of funding the international reserves portfolio (see text below).

Numbers may not add due to rounding.

[a] Includes other adjustments such as the Consumer Price Index adjustment and the translation of marketable bonds payable in foreign currencies to Canadian dollars using the closing rates of exchange at March 31, 2003.

[b] These securities are issued at 3-, 6- and 12-month maturities and are therefore rolled over a number of times during the year for refinancing. This results in a larger number of new issues per year than stock outstanding at the end of the fiscal year. These amounts include cash management bills (CMBs); there were no CMBs outstanding at the beginning of fiscal 2002–03, while $4 billion of CMBs were outstanding at the end of 2002–03.

[c] Includes $492.0 million in securities assumed by the Government of Canada on February 5, 2001, on the dissolution of Petro-Canada Limited.

[d] Includes the bond buyback program on a cash and switch basis, and the pilot Cash Management Bond Buyback program.

Source: *Public Accounts of Canada.*

Impact of Marketable Bond Repurchases on the Debt Stock

Marketable bond buyback operations permit the maintenance of a liquid new bond issue program through the repurchase of older, less liquid bonds. These operations have a neutral impact on the market value of the debt, a temporary impact on the par value of the stock of government debt, and a very modest impact on debt-servicing costs.

When outstanding bonds are repurchased at premium, the par value of the debt (the basis for accounting) increases temporarily due to the need to issue more of the new bonds to pay for the premium on the old bonds. The opposite effect is observed when bonds are bought back at a discount. This effect on the par value of the debt is temporary, as buyback operations advance the time before outstanding bonds trading at a premium or discount would need to be refinanced with new bonds at par value.

Since the inception of the program, the Government has consistently paid premiums on bonds repurchased. This is due to: the basket of eligible bonds that was exclusively composed of illiquid, high-coupon bonds trading with large premiums before 2002–03; and interest rates that have fallen to record lows since early 2000, contributing to a further increase in the premiums at which bonds were repurchased. Despite the broadening of the basket, almost 70 per cent of the bonds repurchased in 2002–03 were illiquid, high-coupon bonds accounting for 90 per cent of premiums paid.

The continued popularity and expansion of the buyback program in 2002–03 significantly increased the amount of premiums paid, increasing the par value of the debt by about $3.3 billion in 2002–03 from about $1.5 billion in 2001–02. Most of this increase is due to the increase in buyback volume from $5.6 billion in 2001–02 to $12.1 billion in 2002–03. Since 1998 the cumulative impact on the par value of the Canadian debt has been about $5.6 billion (see Table 2).

Table 2
Cumulative Impact of Buyback Operations
(on Par Value of the Debt)

Amount repurchased	1998–99	1999–00	2000–01	2001–02	2002–03
			($ millions)		
Buybacks on a cash basis	327	1,017	1,646	2,852	4,074
Buybacks on a switch basis	–	–	–	2	1,559
Total bond buyback program	327	1,017	1,646	2,854	5,633

Source: Department of Finance.

The cumulative impact of buybacks on the par value of the debt should reach its maximum within the next few years and diminish thereafter. The decline will occur as availability of illiquid high-coupon bonds falls. Eventually bonds may be repurchased at a discount, with the effect of reducing the par value of the debt.

Real Return Bonds

In 2002–03 issuance of real return bonds (RRBs) was in keeping with the announced target of $1.4 billion, increasing the level of outstanding RRBs from $14.8 billion to $16.2 billion (from $16.8 billion to $19.1 billion including the Consumer Price Index adjustment) as at March 31, 2003 (see Table 1 on page 24). In 2002–03 the third RRB benchmark, with a December 1, 2031 maturity, was reopened four times to build a total outstanding of $5.8 billion (see Reference Table X for more information on RRB auctions).

Treasury Bills and Cash Management Bills

The stock of outstanding Treasury bills and cash management bills (CMBs), which are a shorter-dated form of Treasury bills, at the end of the 2002–03 fiscal year was slightly larger than the $90-billion to $100-billion range announced in the 2002–03 *Debt Management Strategy.* The stock of outstanding Treasury bills and CMBs increased by $10.4 billion during 2002–03, to $104.4 billion at March 31, 2003 (see Table 1 on page 24). The increase was for the most part due to bonds repurchased under the cash management bond buyback program and an increase in cash balances over the year, which increased by $5.1 billion, from $11.4 billion on March 31, 2002, to $16.5 billion on March 31, 2003. During the year $12.9 billion of bonds were repurchased under the cash management bond buyback program.

There were no CMBs outstanding at the beginning of fiscal 2002–03, while $4 billion of CMBs were outstanding at the end of 2002–03.

Retail Debt

In 2002–03 the level of outstanding debt held by domestic retail investors—Canada Savings Bonds and Canada Premium Bonds—decreased from $24.0 billion to $22.6 billion. Gross sales and redemptions were $3.5 billion and $4.9 billion, respectively, for a net change of -$1.4 billion in the stock of retail debt.

Foreign Currency Debt Programs

Canada Bills

In 2002–03 the level of outstanding Canada bills decreased from $3.4 billion (US$2.1 billion) to $2.6 billion (US$1.8 billion). In 2002–03 Canada bills were issued, on average, at an all-in cost of US$LIBOR less 15-20 basis points.

Foreign Currency Denominated Bonds

There was no new foreign bond issuance in 2002–03. A total of $4.8 billion (US$3.3 billion) of foreign currency bonds matured in 2002–03. The total outstanding was $14.0 billion (US$9.5 billion).

Canada Notes

The stock of outstanding Canada notes remained roughly unchanged at $1.2 billion (US$0.8 billion) during 2002–03. There was no new issuance.

Euro Medium-Term Notes

In 2002–03 there were no new Euro Medium-Term Note transactions, and the total outstanding increased from $3.2 billion (US$2.0 billion) to $3.3 billion (US$2.2 billion) due to the appreciation of the euro compared to the Canadian dollar.

Cross-Currency Swaps

In 2002–03 the Government of Canada raised $2.2 billion (US$1.5 billion) to fund the foreign exchange reserves by entering into 36 cross-currency swaps. A total of US$2.4 billion of swaps matured in 2002–03. At the end of the 2002–03 fiscal year, the outstanding amount of cross-currency swaps totalled $29.4 billion (US$18.6 billion) (see Reference Table XI for transaction details). Taking into account the effect of cross-currency swaps, foreign currency obligations were 11.5 per cent of market debt.

Part II: Report on the 2002–2003 Debt Strategy

The federal debt strategy covers the management of the federal market debt and related operational activities, including the management of Canadian-dollar cash balances and the funding and investment of Canada's foreign exchange reserves. Annual debt strategy planning sets out the objectives for the year in each of these domains and provides for a series of initiatives. As required by legislation, the debt strategy is published and tabled in Parliament before the start of each fiscal year.

There are two main themes underlying the objectives of the 2002–03 federal debt strategy: supporting a well-functioning market in Government of Canada securities and managing risks. The Government has taken steps to support both a well-functioning primary and secondary market for Government of Canada securities. The Government supported a liquid primary market for government securities through a variety of measures to enhance programs and participation. Also, it continued to work with regulators to enhance secondary market liquidity, transparency and integrity.

In line with the increased attention paid to risk management by financial market participants in recent years, the Government has implemented a comprehensive risk management framework for treasury risks related to the debt program. The key treasury risks for the Government relate to changes in interest rates and their effect on domestic borrowing costs (interest rate risk), and the Government's credit exposure to financial institution counterparties with which it transacts in the management of the debt (credit risk). In 2002–03 significant work related to the Government's management of both interest rate and credit risk took place.

A Well-Functioning Government of Canada Securities Market

The advent of a period of federal budgetary surpluses in the 1990s ushered in a new era in federal debt management: one focused on maintaining a well-functioning market in an environment of declining borrowing needs. Over the past several years, the majority of federal debt strategy initiatives have been in this domain, and this focus continued in 2002–03.

A well-functioning wholesale market in Government of Canada securities benefits the Government as well as a wide range of market participants. For the Government as a debt issuer, a well-functioning market attracts investors and ensures that funding costs are kept low. For market participants, a liquid and active secondary market in government debt provides credit-risk-free assets for investment portfolios, a pricing benchmark for other debt issues and swaps, and a primary tool for hedging risk.

The Government's efforts to maintain and enhance the market for its securities have targeted both the issuance of bonds and Treasury bills through auctions, and the liquidity and efficiency of the secondary market. Program initiatives of note in recent years include increasing the target sizes for benchmark 2-, 5-, 10- and 30-year bonds and the size of new bond issues, and implementing bond buybacks. The Department of Finance and the Bank of Canada have also worked with market participants and securities regulators to develop a framework to enhance the transparency and integrity of the fixed-income market. In 2002–03 these areas continued to be the primary focus of government initiatives.

The section entitled "Debt, Cash and Reserve Management Indicators" describes commonly used indicators of a well-functioning securities market. These include the degree to which auctions in the primary market are well bid, the level of liquidity and trading in the secondary market, and cash and reserves management performance. While there are a number of factors that affect these indicators, debt managers follow these measures when examining government debt management initiatives. The measures, however, do not by themselves define the success of specific government debt management policies.

Marketable Bond Program

The use of liquid benchmark bond issues according to a regular, pre-announced quarterly calendar has been a key feature of the Government's approach to funding domestic operational requirements since the early 1990s. There are currently auctions of 2-, 5- and 10-year issues every quarter, and 30-year issues on a semi-annual basis. Each issue contributes to the creation of a large and liquid benchmark at the respective maturity.

The gross bond program increased by $2.1 billion in 2002–03, while the net bond program decreased by $4.3 billion (see Table 3).

Table 3
Bond Program

	1998–99	1999–00	2000–01	2001–02	2002–03
			($ millions)		
Bonds issued at auctions	36,300	44,750	38,500	39,800	36,400
Bonds issued at switches	–	–	–	400	5,900
Gross bond program	36,300	44,750	38,500	40,200	42,300
Buybacks on a cash basis	1,000	3,263	2,832	5,258	7,067
Buybacks on a switch basis	–	–	–	387	4,999
Total bond buyback program	1,000	3,263	2,832	5,645	12,066
Net bond program	35,300	41,487	35,668	34,556	30,234

Source: Department of Finance.

In 2002–03 the initiatives undertaken in the bond program to maintain and develop a well-functioning market in Government of Canada securities were:

- **30-Year Issuance:** The Government reaffirmed its commitment to continued issuance of 30-year bonds. There was a strong consensus among market participants that issuance of 30-year Government of Canada bonds is needed to provide a long-dated asset (given the limited supply of alternative long-term fixed-income instruments in Canada, particularly for pension fund and insurance company portfolios), as well as a pricing benchmark for other instruments.
- **10-Year Issuance:** Following consultations in the summer of 2002, the Government committed to maintain an annual 10-year benchmark cycle to ensure regularity and transparency, and support liquidity in the market for Government of Canada securities. This initiative also supports a liquid futures market by maintaining a viable basket of eligible government securities. However, at that time, the annual cycle constrained the building of a large benchmark. On September 25, 2002, the Government of Canada closed the June 2012 10-year benchmark at $11.6 billion outstanding, resulting in a slight undershoot of the benchmark target of $12 billion–$15 billion. (The benchmark target range for 10-year bonds was subsequently changed from $12 billion–$15 billion to $10 billion–$14 billion starting in fiscal year 2003–04).
- **2-Year Issue Size:** In the consultations in the summer of 2002, most market participants agreed that the issuance of 2-year bonds could be modestly reduced at times when the 2-year benchmark being built is fungible with an existing large, liquid issue. Therefore, in order to limit the total amount of bonds maturing in December 2004, the August 28, 2002 2-year auction size was held to $3 billion, a reduction of $500 million from prior 2-year issues.
- **Turnaround Time for Auctions:** In November 2002 the turnaround time for auctions was reduced from 15 minutes to 10 minutes. The move to shorter processing times, in keeping with technological advancements and sovereign best practices, reduces participants' market risk and supports broad participation in government auctions.

Bond Buyback Programs

Buyback programs have become sizeable and play a strategic role in maintaining an active new issue bond program. There are two types of bond buyback programs currently in place: regular bond buybacks and cash management bond buybacks. Regular bond buybacks, which take place on a cash or switch basis, permit the maintenance of a liquid new bond issue program by buying back older, less liquid bonds with a remaining term to maturity from 18 months to 25 years. The second kind of buyback, the cash management bond buyback, aids in the management of the Government's cash balances by buying back bonds maturing in up to 18 months.

Regular bond buyback operations

Regular bond buyback operations are conducted on a cash and switch basis.

Bond buyback operations on a cash basis: These operations involve the exchange of less liquid bonds for cash and are conducted shortly after auctions of similar maturity bonds. They were introduced on a trial basis in 1998–99 to enhance liquidity in the primary market for Government of Canada securities. Based on favourable performance and market reaction, the program was implemented on an ongoing basis in 2000–01 and now plays an important role in maintaining the auction size of the new issue bond program. Since 2001–02 buyback operations on a cash basis have been conducted after every nominal bond auction.

Bond buyback operations on a switch basis: These operations involve the exchange of less liquid bonds for new issue (replacement) bonds on a duration-neutral basis. Buybacks on a switch basis assure minimal impact on bondholders' market risk and thus broaden participation in buyback operations. The first pilot switch operation was successfully conducted in the fourth quarter of 2001–02 in the 30-year sector for an amount of $400 million.

Given strong support by market participants during 2002–03, the pilot program was continued and gradually expanded to all maturities. This provided market participants with more frequent access to benchmark bond issues and helped reduce market participants' risk. Switch buybacks are now held periodically and are announced in the quarterly bond auction schedule.

Regular bond buyback operations were conducted on a larger scale than in 2001–02 mainly due to a broader utilization of buyback operations on a switch basis. The regular bond buyback operations permitted the issuance of a larger amount (+$12 billion) of new benchmark bonds than in the absence of a buyback program.

In 2002–03 the initiatives undertaken to enhance the functioning of regular bond buybacks were:

- *Broadening the buyback basket:* At the inception of the regular bond buyback program, the basket of eligible bonds was exclusively composed of illiquid, high-coupon bonds. As dealers and customers cleared out their inventories, it became necessary to broaden the buyback basket in order to maintain current bond issuance and auction sizes.

  In 2002–03 the buyback basket was expanded to include some older benchmark bonds and their fungibles. Bonds that continue to be excluded from buybacks include issues in the 2-, 5- and 10-year sectors that are currently being built up as a benchmark, the current and preceding benchmark, and those having maturities equal to or greater than 25 years. The decision on specific bond issues to be included in buyback operations takes into account the views of market participants and is announced with the Call for Tenders.

- *Introducing a $6-billion floor for old benchmark bonds:* In response to comments received during the summer 2002 consultations, the Government announced that outstanding amounts of older benchmarks would not be reduced below $6 billion. This operational enhancement was introduced to help maintain liquidity in older, large off-the-run benchmarks targeted by the buyback program. When two or more issues are fungible, the total amount of

Government of Canada bonds maturing on that date will be considered in the calculation of the $6-billion minimum threshold. However, the conditions governing the pilot cash management bond buyback program will apply when bonds become eligible for this repurchase program.

- *Increasing the announced buyback ceiling:* In order to allow the Government to take advantage of favourable buyback opportunities when they exist, the announced ceiling for individual buyback operations was raised from 2001–02 levels for regular buybacks (both on a cash and switch basis) and cash management bond buyback operations. Therefore, on many occasions, when conditions did not warrant buying back up to the announced ceiling, the amount purchased by the Government was lower than the announced ceiling.
- *Moving up the submission deadline for buyback operations on a cash basis:* During the summer 2002 consultations, market participants indicated that reducing the time period between the publication of auction and buyback results would reduce risk and provide an incentive for increased participation. In response to these comments, the submission deadline for buyback operations on a cash basis was advanced from 1:15 p.m. to 1:00 p.m. starting November 25, 2002. In tandem with the reduced turnaround time for bond auctions announced the same day, this reduces the time period between the publication of auction and buyback results from 1 hour to 35 minutes.
- *Timing of switch operations:* Buyback operations on a switch basis were moved from 12:30 p.m. to 10:30 a.m. to reflect market participants' preferences and to increase the participation of institutional investors. Typically held at 10:30 a.m. on Wednesdays, these operations were also held on some Thursdays when Wednesdays were not available due to holidays or other special events. This initiative became effective in September 2002.
- *Turnaround time for regular buyback operations:* In November 2002 the turnaround time for regular buyback operations was reduced from 30 minutes to 15 minutes. The move to shorter processing times, which is in keeping with technological advancements and sovereign best practices, reduces participants' market risk and supports broad participation in government operations.

The Cash Management Bond Buyback Program

The cash management bond buyback (CMBB) program, introduced on a pilot basis in early 2001, was implemented primarily to help manage the Government's cash requirements by reducing the high levels of government cash balances needed to redeem large bond maturities.

In contrast to the regular bond buyback program aimed at supporting a full new issue bond program, the CMBB program involves buying back bonds coming to maturity in the near future. By reducing the need to accumulate large cash balances leading up to large bond maturities, the CMBB program also smoothes out seasonal fluctuations in Treasury bill issuance.

The first CMBB of $500 million was held in January 2001 and a total of $2.5 billion was repurchased during the 2000–01 fiscal year. In 2002–03 the CMBB program increased from $11.5 billion in 2001–02 to almost $12.9 billion due to the increase in operational frequency.

In 2002–03 the initiatives undertaken to enhance the functioning of the CMBB program were:

- *Increasing the announced buyback ceiling:* In order to allow the Government to take advantage of favourable buyback opportunities when they exist, the announced ceiling for individual buyback operations was raised from 2001–02 levels for CMBB operations. Therefore, on occasions when conditions did not warrant buying back up to the announced maximum, the amount purchased by the Government was lower than the announced ceiling.
- *Turnaround time for CMBB operations:* On November 25, 2002, the turnaround time for CMBB operations was shortened from 30 minutes to 15 minutes to reduce participants' market risk and support participation.

Treasury Bill Program and Cash Management Bill Programs

Since the spring of 1999, the Government has regularly sought the views of market participants on the structure and operation of the Treasury bill and cash management bill (CMB) programs. In 2002–03 the majority of market participants continued to indicate that they were generally satisfied with the functioning of the two programs and that no major adjustment was required.

In 2002–03 Treasury bill issuance increased by $23.5 billion, from $189.5 in 2001–02 to $213.0 billion. Issuance increased by $14.1 billion in the 3-month tranche and $4.7 billion in both the 6- and 12-month tranches. During the year $23.8 billion of CMBs were issued through 13 auctions with maturities ranging between several days to six weeks (see Table 4).

- *Turnaround time for Treasury bill and CMB auctions:* On November 25, 2002, the operational turnaround time was reduced from 15 minutes to 10 minutes.

Table 4
Treasury Bill and CMB Program

	1998–99	1999–00	2000–01	2001–02	2002–03
			($ millions)		
CMB	25,750	19,700	9,000	7,500	23,750
3-month Treasury bills	90,800	100,700	88,100	103,300	117,400
6-month Treasury bills	42,600	46,600	38,600	43,100	47,800
12-month Treasury bills	39,500	46,600	38,600	43,100	47,800
Treasury bills	172,900	193,900	165,300	189,500	213,000
Total	198,650	213,600	174,300	197,000	236,750

Source: Department of Finance.

Receiver General AM and PM Auctions

The Bank of Canada conducts two auctions per day for the Government's domestic cash balances. The morning or "AM" auction is held at 9:15 a.m. while the afternoon or "PM" auction is held at 4:15 p.m. The AM auction is primarily for the purpose of investing surplus cash balances for periods that range from one day to several weeks. The purpose of PM auctions is to invest residual government cash balances resulting from cash flows taking place during the day (following the AM auction) and to facilitate the Bank of Canada's management of daily settlement balances in the country's Large Value Transfer System (LVTS). The PM deposits typically mature the following business day.

Prior to September 10, 2002, the AM and PM deposit auctions were conducted on an uncollateralized basis, and Canadian financial institutions that were direct clearers in the LVTS were the only eligible participants. Starting on September 10, 2002, a new collateralized framework was implemented for the AM auctions in order to strengthen the management of credit risk and increase competition by opening the auctions to a wider range of participants. No changes were made to the PM auction framework.

The average daily level of Receiver General cash balances at the financial institutions increased from $7.1 billion in 1998–99 to $10.2 billion in 2000–01, then decreased to $6.1 billion in 2002–03.

Increasingly large bond maturities (concentrated on March 1, June 1, September 1 and December 1), the introduction in 1999 of the LVTS, and unexpectedly strong financial outcomes all contributed to the growing levels of average cash balances in 1999–00 and 2000–01.

Average daily cash balances declined in 2001–02 and 2002–03 as a result of smaller government surpluses, the impact of the cash management bond buyback program introduced in January 2001, a more mature LVTS and fewer large bond maturities (there were no large maturities in March 2002 or 2003—see Table 5).

Table 5
Average Daily Receiver General Cash Balances Held at Financial Institutions

	1998–99	1999–00	2000–01	2001–02	2002–03
			($ millions)		
Average daily cash balances	7,113	9,021	10,188	7,921	6,139

Source: Department of Finance.

Market Transparency and Integrity

The Government and the Bank of Canada have a strong interest in improving the transparency of the Government of Canada securities market because transparent markets can enhance the integrity and attractiveness of the Government of Canada securities market for a wide array of investors. This in turn supports the Government's debt strategy objective of achieving stable, low-cost funding, and the Bank's interest in an efficient mechanism for the transmission of monetary policy.

The Department of Finance and Bank of Canada have been actively involved in supporting the development of more transparent markets for many years. In particular, there have been ongoing discussions with Canadian securities regulators and market participants on the development of a regulatory framework for electronic or alternative trading systems since rules were first proposed in 1999. A key concern has been to facilitate enhanced market transparency without adversely affecting the liquidity of the Government of Canada securities market. For more information on this issue, please see the Web sites of the Bank of Canada (www.bankofcanada.ca) and the Ontario Securities Commission (www.osc.gov.on.ca).

Managing Treasury Risk

The debt, cash and reserves management operations of the Government of Canada engender exposure to various forms of financial risk, as detailed in the box on page 36. The primary focus of risk management in the context of federal debt strategy has always been the management of the structure of the domestic debt, which, due to the impact of changing interest rates, is by far the most significant form of financial risk to which the Government is exposed.

In recent years, in addition to focusing on the maintenance of a prudent debt structure, the Government has introduced a comprehensive risk management framework for identifying and managing all forms of treasury risk, in particular the market, credit, operational and legal risks related to the financing and investment of its foreign exchange reserves and the investment of its Canadian-dollar cash balances.

The Government's risk management policies, supported by the creation of a special risk unit at the Bank of Canada, call for prudent management of treasury risks based on best practices. Risk tolerances are low, calling for market risk to be immunized to the greatest extent possible and the maintenance of high credit quality and portfolio diversification standards.

The major considerations and recent initiatives in these domains are addressed in this section, while a detailed description of the analytical tools used to assess the debt structure can be found in Annex 1.

Forms of Treasury Risk

Risk Type	*Definition*	*Government Exposure*
Interest rate risk	Risk of loss arising from unexpected changes in interest rates.	Primarily in the structure of the debt stock through the amount of floating-rate debt.
Foreign exchange risk	Risk of loss arising from changes in values of currencies.	In the value of reserve assets.
Credit risk	Risk of loss arising from default or downgrade of a counterparty.	In swap contracts, during the settlement period of transactions and in foreign currency investments (i.e., bonds, deposits).
Operational risk	Risk of loss arising from deficiencies in information systems and internal controls or from human error.	In all transactions related to debt, cash management and reserves management.
Market risk	Risk of loss arising from movements in foreign interest rates.	In the value of foreign currency debt and assets.
Legal risk	Risk of loss arising from contracts that are not legally enforceable or appropriately documented or executed.	In government contracts related to debt and reserves management (e.g., swap and repo contracts).
Liquidity risk	Risk of loss arising when a security asset cannot be sold at or near the previous market price because of inadequate market depth or market disruption.	In the value of reserve assets.
Refinancing risk	Risk of loss arising when a security (liability) cannot be fully sold because of market disruption or lack of demand.	At domestic auctions and for foreign currency debt.

Balancing Prudence and Cost: Debt Structure

As noted above, the federal debt structure has significant exposure to interest rate risk. In simple terms, every year a sizable portion of the debt matures and must be refinanced. As a result, the Government is exposed to the risk of an increase in interest rates that could potentially disrupt the fiscal plan.

This situation makes choosing an appropriate debt structure—one that balances prudence and cost savings—an important decision. In determining the appropriate debt structure, the Government generally faces a trade-off between keeping borrowing costs low and ensuring that the cost impact of unexpected increases in interest rates does not exceed its tolerance for risk. Specifically, long-term instruments such as Government of Canada bonds typically have higher debt-servicing costs than short-term instruments such as Treasury bills. On the other hand, interest costs for outstanding bonds are known with certainty over their entire life, while Treasury bills need to be refinanced several times throughout the year at new prevailing market interest rates.

The main operational measure used to manage the debt structure is the mix of fixed-rate and floating-rate debt instruments that make up the debt stock. The fixed-rate share of the debt is the proportion of interest-bearing debt having fixed rates—debt that does not mature or need to be re-priced within a year—relative to the total interest-bearing debt stock. Therefore, debt-servicing costs increase (decrease) and interest rate risk decreases (increases) with a higher (lower) fixed-rate share.

During the 1990s the Government raised the fixed-rate share of the federal debt from one-half to two-thirds to provide more cost stability in an environment of fiscal and current account deficits, volatile interest rates and high debt levels. As noted in the 2003 budget, by establishing a more prudent fixed-rate debt structure and reducing the debt, the Government reduced the sensitivity of its annual debt-service charges to changes in interest rates. For example, a 100-basis-point shock in interest rates in 2002–03 would have increased annual interest costs by $0.8 billion under the current structure, compared to $1.8 billion at the time of the 1995 budget.

Finding a New Balance

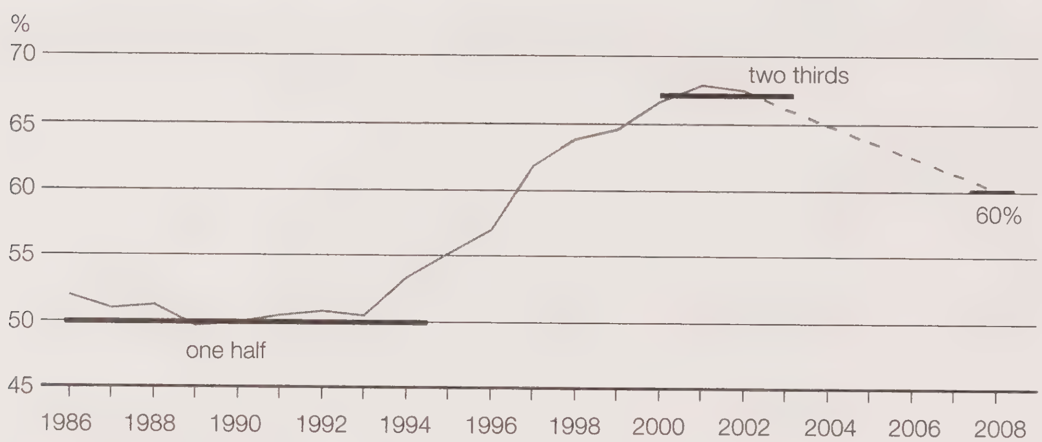
The target debt structure announced in the 2002–03 *Debt Management Strategy* was two-thirds fixed-rate debt. However, during the year, analysis was undertaken which resulted in a change in the target.

For the past five fiscal years, including 2002–03, the fixed-rate portion of the debt has been managed around a two-thirds target. Over the same period Canada's economic and fiscal position has strengthened substantially. Canada now has low and stable inflation and interest rates, lower foreign indebtedness and a current account surplus. In addition, the reduction in the debt level has provided Canada with greater financial stability, reduced vulnerability to events happening beyond our borders, and contributed to the restoration of Canada's triple-A credit rating.

As a result of these positive economic and fiscal developments, analysis conducted in 2002 indicated that the Government was in a position to adjust its debt structure to lower future financing costs without exposing itself to significantly higher levels of risk. Consequently, the Government announced a change in the debt structure target in the 2003 budget. The fixed-rate portion of the debt will be lowered from the previous target of two-thirds to 60 per cent over a five-year period (see Figure 1).

The decision to alter the target debt structure is aimed at reducing borrowing costs for the Government without compromising debt cost stability. Based on the 2003 budget outlook, the planned change to the debt structure is expected to reduce the Government's net debt-servicing costs by up to $750 million during the five-year transition period and by up to $500 million, on average, each year thereafter. Annex 1 describes in more detail the analytical tools and results supporting the decision.

Figure 1
Target Fixed-Rate Share of the Debt



Source: Department of Finance.

Managing the Risks of Holding Cash and Reserves

In recent years the Government has put in place frameworks to manage financial risk and instituted practices to limit risk exposure, notably its exposure to the financial institution counterparties holding cash and foreign exchange reserves.

In the late 1990s the Government moved to put in place a governance framework that separates risk management from treasury operations. A Risk Management Unit was established in 1997 to monitor, report and advise on the risk position of the Government. A Risk Management Committee of senior officials of the Department of Finance and the Bank of Canada meets regularly to review risk reports and to provide guidance and accountability on the Government's treasury risk policies.

Foreign currency reserve assets and the liabilities financing those assets have been managed together on a portfolio basis since 1998, based on the same principles used by private sector financial institutions. The Government uses an asset-liability matching framework, whereby assets and liabilities financing these assets are matched (as closely as possible) in currency and duration, so that the Government is not exposed to currency and interest rate risks. The risk of material loss arising from interest and/or currency risk is very low.

In the late 1990s the Government also developed a rigorous, comprehensive credit risk system that is consistent with best practices in credit risk management and includes credit exposure limits pertaining to issuers and counterparties across all lines of business. Specifically, the management of Canadian-dollar cash balances and the investment of reserve assets are governed by detailed investment and credit guidelines approved by the Minister of Finance. The guidelines limit the Government's credit exposure to commercial financial institution counterparties and to the issuer of securities held by the Government in the foreign currency reserve portfolio.

In 2002–03 the Government continued to further strengthen its risk management framework by implementing collateral management frameworks and amending its investment guidelines. Collateral management systems are increasingly the norm in capital markets as a way of managing credit risk. Under these frameworks, high-quality collateral (e.g., cash, securities) is posted to the Government when its credit exposure to financial institution counterparties exceeds specified limits.

Collateral Framework for Investment of Canadian-Dollar Cash Balances

As indicated earlier, a new collateralized framework for AM auctions was implemented in September 2002. The new framework strengthens the management of the credit risks involved in the investment of cash balances through the use of credit ratings, credit lines and collateral agreements, and increases competition in the auction of cash balances by opening the AM auctions to a wider range of participants. The number of eligible participants has increased from 13 to 20 institutions. The PM auction remains unchanged (see the Bank of Canada Web page www.bankofcanada.ca/en/auction/rec_general.pdf for further information on terms and conditions).

Collateral Framework for Swaps and Foreign Currency Cash Balances

Cross-currency swaps of domestic obligations have been used since March 1995 to fund the foreign exchange reserves, as they are highly cost-effective compared to other sources of foreign currency funds. As a result, the Government's swap portfolio has increased significantly—as of March 31, 2003, it stood at $29.4 billion.

To mitigate the credit risk associated with swaps, the Government implemented a collateral management framework for swaps in April 2002. High-quality collateral is posted to the Government if individual credit exposures arising from changes in the marked-to-market values of swap contracts exceed pre-set limits. As of March 31, 2003, the swap collateral framework included 10 financial institution counterparties.

In addition to the swap collateral framework, in the latter part of 2002–03 the Government developed a US-dollar repo program to reduce the use of uncollateralized short-term US-dollar deposits with commercial banks. Under the repo framework, collateral is posted to the Government to protect US-dollar cash invested with the financial institution counterparties. As of March 31, 2003, the Government had signed three counterparties to its US-dollar repo framework.

Amendment of Investment and Risk Guidelines

With the implementation of a collateral management framework for the Government's cross-currency swap program, the Government modified its credit guidelines in 2002 to accept A-rated financial institutions as eligible counterparties for deposits and swaps. This change will help the Government further diversify its investments across financial institution counterparties without increasing risk significantly. Credit exposure to A-rated financial institutions will be maintained within prudent standards, consistent with best practices of comparable sovereigns and major market participants.

The investment guidelines governing the management of the reserve asset portfolio were also modified in 2002 to allow a limited amount of securities of A-rated sovereigns to be held within prudent limits (previously the Government could only invest in AA- and AAA-rated sovereigns), mirroring the change to allow limited exposure to A-rated financial counterparties involved in reserves management. This change is in line with investment practices of a number of OECD sovereigns and will allow the Government to further diversify its reserves investment portfolio.

Maintenance of Supplementary Liquidity

In August 2002 the Government successfully renegotiated its existing US$6-billion standby credit facility with international banks. The standby facility provides supplementary liquidity to meet the Government's needs in the event that market disruption makes borrowing through securities markets impossible. Under the renewal of the facility, the composition of the banks in the facility was changed, and the maturity date was extended from 2003 to 2007. No other changes were made to the terms of the facility.

Part III: Debt, Cash and Reserves Management Indicators

This section is divided into three types of measures: the outcome of operations and activity with respect to domestic debt; indicators of cash management performance; and measures of reserves funding and investment. It also summarizes recent external evaluations of government programs. A detailed discussion of the measures used to manage and evaluate the risk structure of the debt stock is covered in Annex 1.

The indicators are intended to provide interested parties with an understanding of some of the key measures that debt managers follow. The measures do not, by themselves, define the success of specific government debt management policies. However, they serve as useful guideposts in helping to assess the outcomes of the Government's debt management initiatives.

Measures of a well-functioning securities market include the degree to which auctions in the primary market are well bid and the level of liquidity and trading in the secondary market. In 2002–03 the Government's Treasury bill and bond auctions continued to be well bid. Primary dealers play the major role at auctions except in the case of real return bond auctions, where customers' winnings exceed that of primary dealers. The secondary market for Government of Canada securities continues to experience healthy trading volumes and turnover ratios that compare favourably to those of other countries. Primary dealers also play a major role in secondary markets, with the top 10 participants accounting for about 90 per cent of turnover of Treasury bills and bonds.

Domestic Debt and Government of Canada Securities Market

There are a number of measures of outcomes in the area of domestic debt management. They can be divided into two groups: those associated with the debt issuance process (the primary market) and those dealing with post-issuance trades (the secondary market).

Primary Market Measures

Marketable Bond, Treasury Bill and Cash Management Bill Auctions

The two most conventional measures of auction performance are the auction coverage and tail.

The *auction coverage* is defined as the total size of bids received divided by the auction size. In this regard, a cover statistic of one is essential and a higher statistic is generally better, as it indicates active bidding and therefore lower costs for the Government.

The Terms of Participation in government auctions require larger dealers (primary dealers) to bid 50 per cent of their bidding limit at a reasonable rate. Maximum coverage ratios from primary dealers (which represents about 85 per cent of winning bids) could reach a maximum of about 2.6 for bond auctions and 2.4 for Treasury bill and CMB auctions, while minimum coverage, assuming that all primary dealers bid at their minimum bidding limit, would total about 1.3 for bond auctions and 1.1 for Treasury bill and CMB auctions.

In 2002–03 coverage remained generally stable for Treasury bill and bond auctions and increased for real return bond auctions. Overall, coverage has remained stable over the last four years (see Table 6).

The *auction tail* is the number of basis points between the highest yield accepted and the average yield. In this case, smaller is better as it indicates strong bidding and therefore lower costs.

These two measures, combined with the yield of the securities issued, describe the quality of an auction in terms of its competitiveness and its impact on the cost of borrowing.

In 2002–03 tails improved in 3-month Treasury bill and medium- to long-term bond auctions, especially for the 30-year bond auctions. Tails widened for 6- and 12-month Treasury bills and for 2-year auctions. Overall, tails have increased slightly from 2001–02 but still remain lower than four years ago (see Table 6).

Table 6
Performance at Auctions

	Coverage					Tail				
	1999–00	2000–01	2001–02	2002–03	4-yr avg.	1999–00	2000–01	2001–02	2002–03	4-yr avg.
CMB	2.12	1.98	1.94	1.98	2.01	2.48	2.31	1.43	1.38	1.90
3-month	1.86	1.96	1.84	1.93	1.90	1.21	1.08	1.28	1.16	1.18
6-month	1.97	2.17	2.03	1.99	2.04	1.18	0.92	0.83	0.85	0.95
12-month	1.86	2.06	1.88	1.86	1.91	1.10	0.96	0.93	1.00	1.00
2-year	2.38	2.42	2.24	2.23	2.32	0.65	0.58	0.66	0.71	0.65
5-year	2.43	2.46	2.23	2.29	2.35	0.66	0.50	0.74	0.65	0.64
10-year	2.25	2.54	2.30	2.33	2.35	1.06	1.08	0.89	0.80	0.96
30-year	2.29	2.29	2.36	2.39	2.33	1.58	2.75	1.07	0.76	1.54
RRB*	3.18	3.06	2.75	3.16	3.03	n.a.	n.a.	n.a.	n.a.	n.a.
Weighted Avg.**	1.98	2.12	1.96	1.99	2.01	1.11	0.99	0.91	1.01	1.01

* Auction tails for RRBs are not relevant since RRBs are distributed through single-price auctions.

** Weighted average excludes CMBs.

Note: The peak in the average tail for 30-year auctions in 2000–01 is due to one of the two 30-year auctions (April 19, 2000 auction), which had an unusually large tail of 4.4 basis points, increasing the annual average to 2.75 basis points.

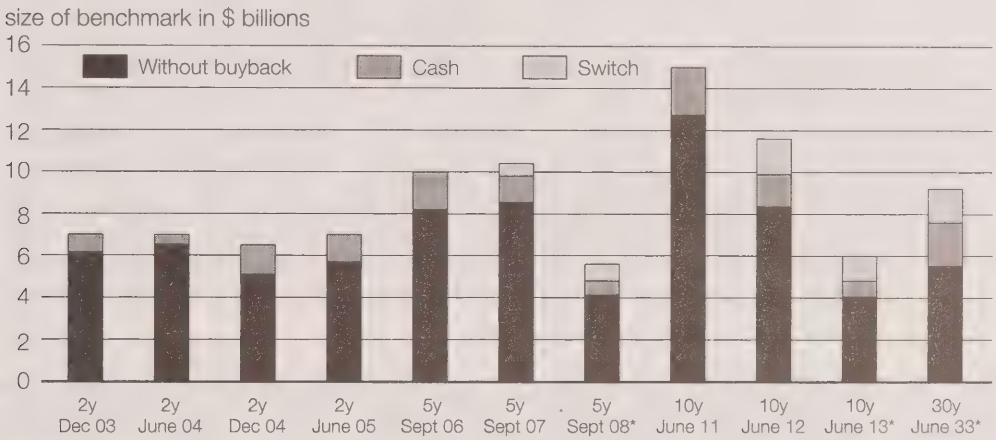
Source: Bank of Canada.

Effectiveness of the Regular Bond Buyback Program

The bond buyback program was introduced to enhance liquidity and maintain an active new issuance in the primary market for Government of Canada securities. Specifically, cash and switch buybacks were introduced to help maintain large benchmark issues.

On average, buybacks have helped to maintain auction sizes that are $500 million larger than they would have been without the buyback program. Meanwhile, buybacks on a switch basis have provided an alternative to issuance at auctions and have contributed to the development of more liquid benchmarks, as shown by Chart 9.

Chart 9
Impact of Regular Buyback Program on Benchmark Sizes
As of March 31, 2003



* Building benchmark.

Source: Department of Finance.

Cash Management Bond Buyback Program

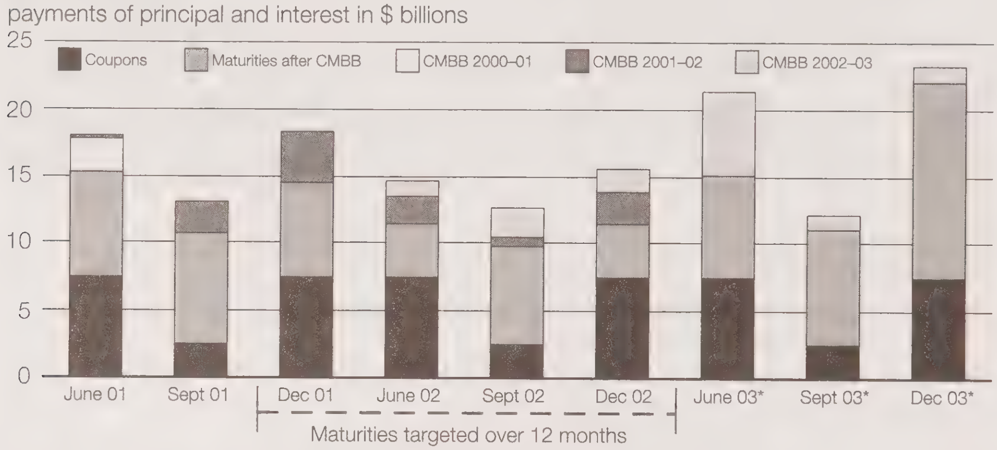
The cash management bond buyback (CMBB) program was implemented to help manage the Government's cash requirements by reducing the high levels of government cash balances needed to redeem large bond maturities. The program also helped to smooth variations in Treasury bill auction sizes over the year.

The CMBB program has lowered the Government's cash requirements at most large-maturity dates. In particular, as of March 31, 2003, the CMBB program had already reduced the June 1, 2003 cash requirement from about $21 billion to about $15 billion by reducing June 2003 bond maturities by $6.2 billion. Since the inception of the program, the CMBB program has reduced sizes of bonds that were targeted for buyback over a full year by an average of 38 per cent (see Chart 10).

Chart 10

Impact of CMBB Operations on the Government's Large Payments

As of March 31, 2003



* These bonds continued to be targeted by operations conducted after March 31, 2003.

Source: Department of Finance.

Receiver General (RG) Auctions

As for bond and Treasury bill auctions, coverage and tail provide useful indicators of RG auction performance. For information on auction yield and the cost of carrying Receiver General cash balances, please see the later section on Canadian-dollar cash balances.

In 2002–03 RG coverage was better than the average of the past three years, especially for AM auctions. This result was to be expected, as the new RG collateralization framework encourages more participation in AM auctions.

AM auction tails improved in 2002–03 by 30 per cent over the four-year average and were quite stable over the year. AM auction tails for the first five months of the fiscal year (before collateralization) were not significantly different from tails for the last seven months of the fiscal year (after collateralization—see Table 7). PM auction tails improved compared to the last four years from 3.64 in 1999–2000 to 2.42 in 2002–03 (average for the fiscal year).

Table 7
Performance at Receiver General Auctions

	1999–00	2000–01	2001–02	2002–03		
				April to Sept 10 2002	Sept 11* 2002 to March 2003	4-yr avg.
AM Auctions						
Coverage	3.28	2.67	2.55	3.32	3.53	2.95
Tail	1.47	1.08	1.89	0.69	0.91	1.34
PM Auctions						
Coverage	1.89	1.97	2.33	2.44	2.45	2.12
Tail	3.64	4.14	2.40	2.81	2.08	3.28

* Sept.10, 2002 marked the start of AM auction collateralization.

Source: Bank of Canada.

Activity of Dealers and Accounts

This section provides information on participation of government securities distributors (primary dealers and other government securities dealers) and customers (institutional investors) in the primary and secondary markets for Government of Canada securities. Primary market activity shares are calculated using participants' allotment amounts at auctions during the fiscal year, and secondary market activity shares are calculated using participants' trading volumes during the fiscal year.

Nominal Bonds

In 2002–03 primary dealers were allotted 91.8 per cent of nominal bond auctions while customers were allotted 5.6 per cent (see Table 8). The 10 most active participants bought 88.7 per cent of the bonds. These percentages are in line with those observed in previous years.

Table 8
Bond Auctions Share (Per Cent) of Amount Allotted to Participants
(Excluding Real Return Bonds)

Fiscal year	PDs	Non-PDs	Customers	Top 10 participants
1999–00	88.1	4.9	7.0	84.8
2000–01	91.5	2.7	5.8	86.1
2001–02	83.7	6.4	9.8	82.2
2002–03	91.8	2.5	5.6	88.7

Source: Bank of Canada.

Real Return Bonds

Unlike the situation in nominal bonds, the primary market in RRBs was split almost evenly between dealers and customers. The 10 most active participants in RRB auctions were allotted 63.9 per cent of the auction, which is in line with historical averages (see Table 9).

Table 9
RRB Auctions Share (Per Cent) of Amount Allotted to Participants

Fiscal year	PDs	Non-PDs	Customers	Top 10 participants
1999–00	45.9	3.4	50.7	65.9
2000–01	45.5	2.7	51.8	68.4
2001–02	39.0	3.9	57.2	59.7
2002–03	47.9	0.9	51.2	63.9

Source: Bank of Canada.

Bond Buybacks

Primary dealers are usually the dominant participants in bond buyback operations. Customers' participation reached a peak of 13.8 per cent in 2001–02, when a few customers were very active in buybacks on a cash basis. In 2002–03 customers' participation returned to a lower level and the primary dealers' share increased to previous years' levels, at 96.4 per cent of operations (see Table 10).

Table 10
Bond Buyback Operations Share (Per Cent) of Amount Allotted to Participants
(Excludes Cash Management Bond Buybacks)

Fiscal year	PDs	Non-PDs	Customers*	Top 10 participants
1999–00	97.6	2.4	0.0	97.2
2000–01	94.1	2.4	3.5	97.1
2001–02	86.2	0.0	13.8	98.4
2002–03	96.4	1.7	1.9	94.5

* Results may underestimate customer participation. Contrary to Treasury bill and bond auctions, customers do not have to inform the Bank of Canada about their participation at buyback operations.

Source: Bank of Canada.

Cash Management Bond Buyback Program

Primary dealers are usually the only participants in CMBB operations, with a share of 100 per cent in 2000–01 and 2002–03 (see Table 11).

Table 11
CMBB Operations Share (Per Cent) of Amount Allotted to Participants

Fiscal year	PDs	Non-PDs	Customers*	Top 10 participants
2000–01	100.0	0.0	0.0	100.0
2001–02	95.9	1.2	2.9	99.2
2002–03	100.0	0.0	0.0	100.0

* Results may underestimate customer participation. Contrary to Treasury bill and bond auctions, customers do not have to inform the Bank of Canada about their participation at buyback operations.

Source: Bank of Canada.

Treasury Bills

For 2002–03 primary dealers accounted for 84.1 per cent of amounts allotted during Treasury bill (T-bill) auctions while customers accounted for 13.6 per cent. Customers' participation in Treasury bill auctions has increased slightly in recent years. In 2002–03 the 10 most active participants accounted for 91.5 per cent of amounts allotted during Treasury bill auctions (see Table 12).

Table 12
T-Bill Auctions Share (Per Cent) of Amount Allotted to Participants

Fiscal year	PDs	Non-PDs	Customers	Top 10 participants
1999–00	85.2	2.9	11.9	88.0
2000–01	87.6	1.5	10.9	92.5
2001–02	86.0	1.6	12.4	93.0
2002–03	84.1	2.2	13.6	91.5

Source: Bank of Canada.

Cash Management Bills

In 2002–03 the 10 most active participants accounted for 95.5 per cent of amounts allotted during CMB auctions. For the same fiscal year, primary dealers accounted for 93 per cent of amounts allotted while customers accounted for 4.5 per cent (see Table 13).

Table 13
CMB Auctions Share (Per Cent) of Amount Allotted to Participants

Fiscal year	PDs	Non-PDs	Customers	Top 10 participants
1999–00	84.3	2.0	12.9	92.1
2000–01	92.9	4.5	2.6	95.6
2001–02	95.6	2.3	2.1	97.9
2002–03	93.0	2.5	4.5	95.5

Source: Bank of Canada.

Receiver General AM and PM Auctions

Prior to September 10, 2002, the AM and PM deposit auctions were conducted on an uncollateralized basis, and Canadian financial institutions that were direct clearers in the Large Value Transfer System (LVTS) were the only eligible participants. Starting on September 10, 2002, a new collateralized framework was implemented for the AM auctions in order to strengthen the management of credit risk and increase competition by opening the auctions to a wider range of participants. No changes were made to the PM auction framework.

Since the introduction of the new framework, to the end of the 2002–03 fiscal year, the top 10 LVTS participants represent 80.9 per cent compared to 99.8 per cent for the first five month of the fiscal year. Other participants of Receiver General auctions gained 18.7 per cent of the amount allotted since the new framework has been in place (see Table 14).

Table 14
Receiver General Auctions Share (Per Cent) of Amount Allotted Between LVTS and Other Participants

Fiscal year	Top 10 LVTS	Top 10 others
1999–00	99.2	–
2000–01	97.3	–
2001–02	98.5	–
2002–03		
– Before Sept 10, 2002	99.8	–
– After Sept 10, 2002	80.9	18.7
– Avg. for 2002–03	88.8	10.9

Source: Bank of Canada.

Secondary Market

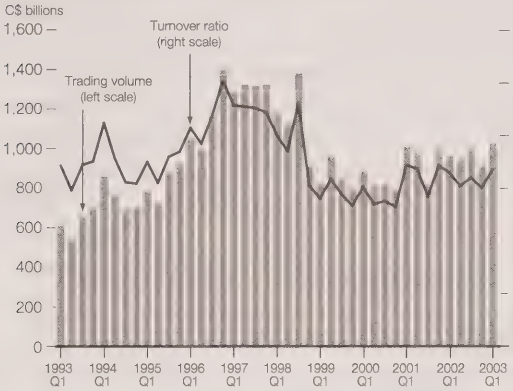
The two conventional measures for liquidity and efficiency in the Government of Canada securities market are trading volume and turnover ratio. These two measures are presented for bonds (Chart 11 and, for international comparison, Chart 15), Treasury bills (Chart 12), bond repos (Chart 13) and Treasury bill repos (Chart 14).

Trading volume, which shows the amount of securities traded per period, is a conventional indicator of liquidity. Large trading volume shows that participants can buy or sell in the marketplace without a substantial change in the price of the securities.

Turnover ratio, which is the ratio of securities traded to the securities float, is a measure of market efficiency. High turnover implies that a large amount of securities changes hands easily over a given period of time, a hallmark of an efficient securities market.

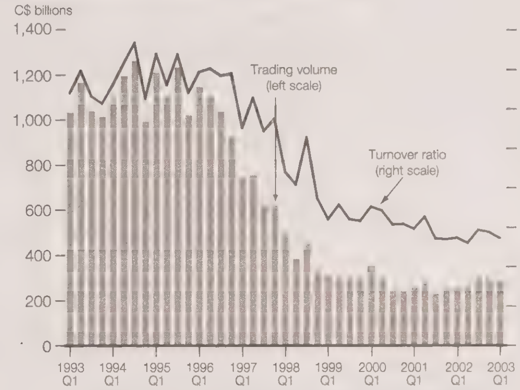
Also, the presence of liquid repo markets and liquid futures contracts characterizes an efficient market. A liquid repo market exists in the Government of Canada securities market for Treasury bills and for nominal bonds. There is also an active futures contract based on the benchmark 10-year bond (Canadian Government Bond contracts).

Chart 11
Government of Canada Bonds Trading Volume and Turnover Ratio



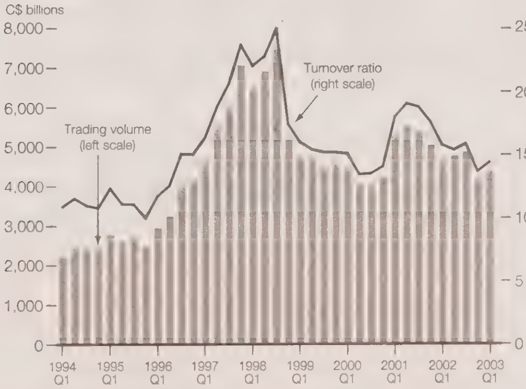
Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 12
Government of Canada Treasury Bills Trading Volume and Turnover Ratio



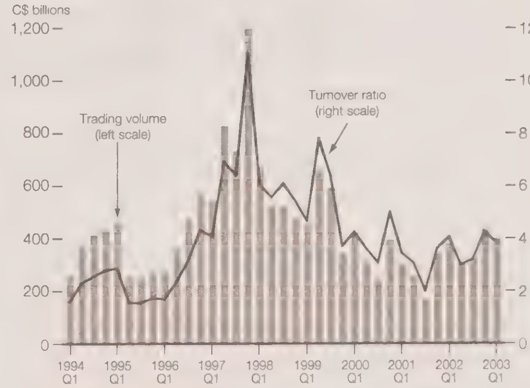
Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada.

Chart 13
Government of Canada Bond Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

Chart 14
Government of Canada Treasury Bill Repos Trading Volume and Turnover Ratio



Note: Trading volume is total trading volume in each quarter. Turnover ratio is total trading volume in each quarter/stock.
Source: Bank of Canada

Market Activity

The volume of transactions in the Government of Canada bond market has grown significantly since 1990. Total marketable bond trading volume was $3,876.6 billion in 2002–03, a 3.7-per-cent increase from 2002–03. The average quarterly turnover ratio was 3.1 times the outstanding stock of bonds in 2002–03, compared to 3.2 in 2001–02 (see Chart 11). The volume of transactions in the Treasury bill market remained at the low levels seen in recent years, as the stock of Treasury bills outstanding has fallen. In 2002–03 total Treasury bill turnover was $1,138 billion.

An active repo market is a hallmark of a well-functioning government securities market, and both Government of Canada bond repos and Treasury bill repos remained active in 2002–03. The total turnover for Government of Canada bond repos in 2002–03 was $18,126 billion, down from $20,536 billion in 2001–02. The average quarterly turnover ratio for bond repos in 2002–03 was 14.7 times compared to 17.7 times in 2001–02 (see Chart 13). The Treasury bill repo market volume in 2002–03 was $1,449 billion and the average quarterly turnover ratio was 3.5 (see Chart 14).

Futures contracts are important complements to an efficient Government of Canada securities market. In Canada the trading volume of futures contracts maintained the levels of previous years. The futures contract based on 10-year Government of Canada bonds (the Canadian Government Bond contracts or CGB contracts) continues to be actively traded, as trading volume reached 1.8 million in 2002, a 1.7-per-cent decrease from 2001. Open interest on the CGB contract as of December 31, 2003, was 63,500, in line with the open interest at the end of 2001. There is also an active market for the 3-month Canadian Bankers' Acceptance Futures (BAX contracts).

Trading Volume by Market Participants

Treasury Bills

Over the last four fiscal years, primary dealers have become the main traders in the Treasury bill secondary market and now represent 98.4 per cent of total trading volume. The 10 most active participants in the Treasury bill secondary market represent 99.5 per cent of trading activities (see Table 15).

Table 15
Treasury Bill Trading Volume, Market Share (Per Cent) of Participants

Fiscal year	PDs	Non-PDs	Top 10 participants
1999–00	96.1	3.9	96.0
2000–01	98.3	1.7	98.3
2001–02	98.3	1.7	99.4
2002–03	98.4	1.6	99.5

Source: Bank of Canada.

Bonds

Primary dealers' and non-primary dealers' shares have remained fairly stable over the last four years at about 94 and 6 per cent, respectively. The 10 most active participants in the bond secondary market represent 95.9 per cent of trading activities (see Table 16).

Table 16
Bonds Trading Volume, Market Share (Per Cent) of Participants

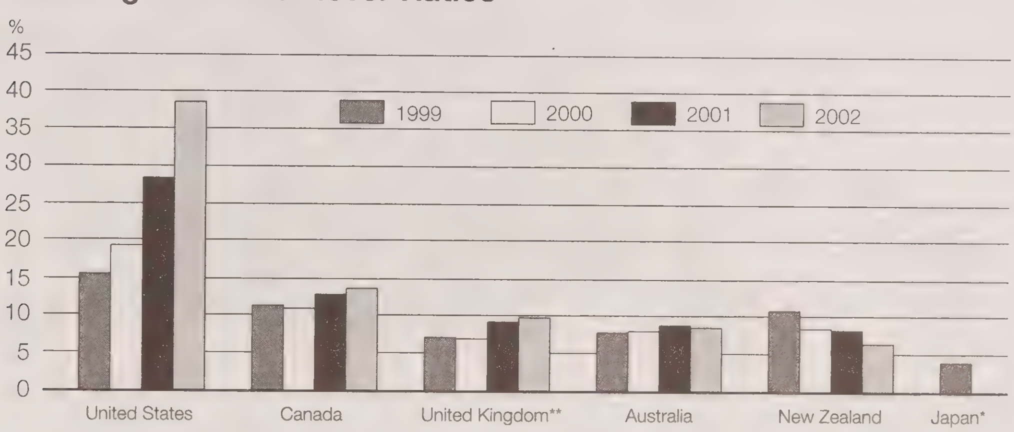
Fiscal year	PDs	Non-PDs	Top 10 participants
1999–00	92.8	7.2	91.1
2000–01	93.5	6.5	91.6
2001–02	94.0	6.0	96.0
2002–03	93.3	6.7	95.9

Source: Bank of Canada.

Comparison With Other Countries

The Government of Canada bond market compares favourably with other major sovereign bond markets. The market had an annual stock turnover level in 2002 of 13.7, behind only the United States, which had a stock turnover level of 38.7 (see Chart 15).

Chart 15
Sovereign Bond Turnover Ratios



* Turnover data are unavailable for Japan for 2000, 2001 and 2002.
** Data for the United Kingdom do not take into account higher issuance levels of inflation-linked bonds compared to other sovereigns.
Note: Turnover ratio is total trading volume in each quarter/stock.
Sources: *Australian Financial Markets Report*, Bank of Canada, Federal Reserve Bank of New York, Japan Ministry of Finance, The Bureau of the Public Debt of the U.S., London Stock Exchange, United Kingdom Debt Management Office, Reserve Bank of New Zealand.

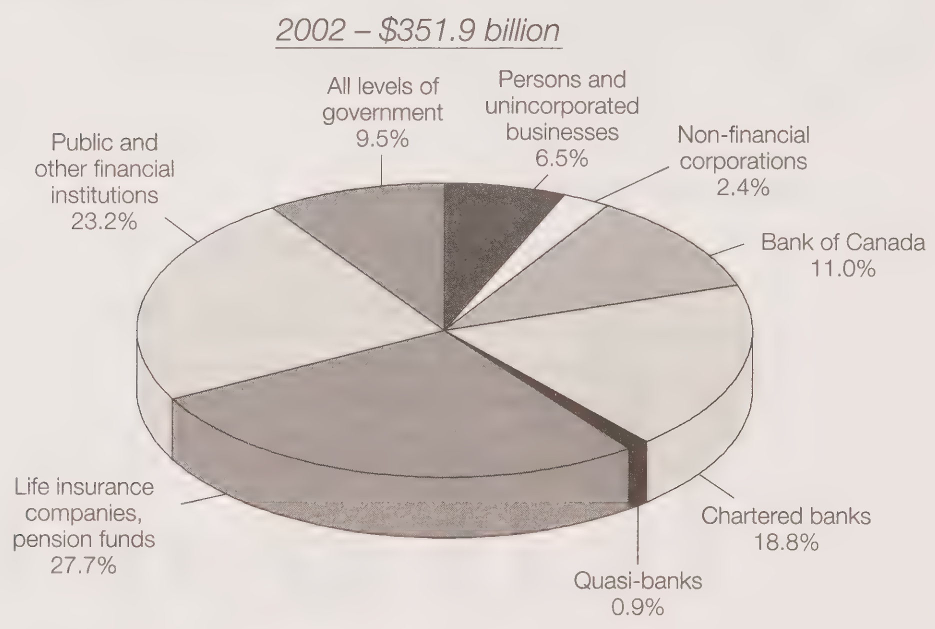
Domestic Holdings of Government of Canada Debt

A diversified investor base helps to keep funding costs low by ensuring there is active demand for Government of Canada securities. The Government of Canada pursues diversification of its investor base by maintaining a domestic wholesale debt program that is attractive to a wide range of investors, offering a retail debt program that provides savings products to suit the needs of individual Canadians, and using a broad array of funding sources in its foreign borrowings.

In 2002 life insurance companies and pension funds accounted for the largest share of domestic holdings of Government of Canada market debt (27.7 per cent), followed by public and other financial institutions such as investment dealers and mutual funds, at 23.2 per cent (see Chart 16.) Taken together, they accounted for over 50 per cent of domestic holdings.

Reference Table IV shows the evolution of the distribution of domestic holdings of Government of Canada debt since 1976.

Chart 16
Distribution of Domestic Holdings of Government of Canada Market Debt



Source: Statistics Canada, *National Balance Sheet Accounts*.

Canadian-Dollar Cash Balances

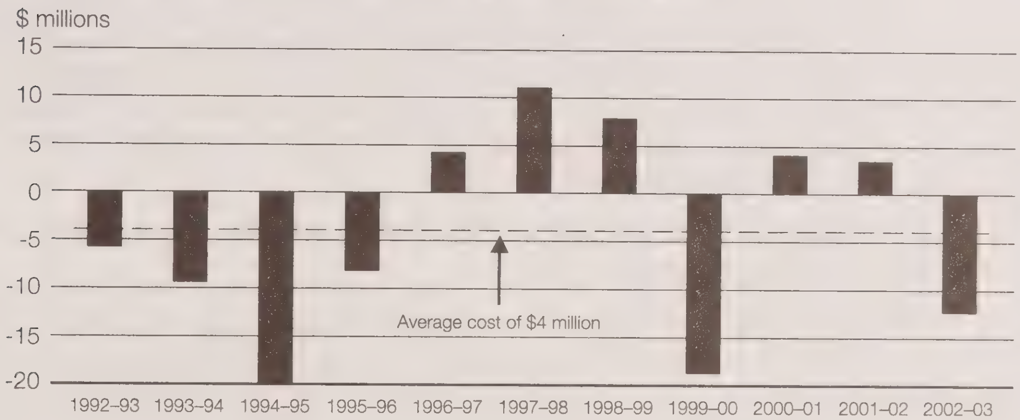
The key measure for the management of cash balances is the net return (cost paid or gain of "carry" earned) on cash balances, which fluctuate widely over the year owing to the scope of the Government's financial operations, periodic large maturities of Government of Canada bonds, the operations of the Bank of Canada and changes in market conditions.

The yield spread earned or carry paid by the Government is the difference between the return on government balances auctioned to financial institutions (typically around the overnight rate) and the average yield paid on Treasury bills. The cost of carry depends on the shape of the yield curve. A normal upward sloping yield curve, which has a positive interest rate spread between the rate at which the Government invests its cash and the rate at which it borrows, results in a cost of carry, as financial institutions pay rates of interest for government deposits based on an overnight rate that is lower than the rate paid by the Government to borrow funds. Conversely, under an inverted yield curve, short-term deposit rates are higher than 3- to 12-month Treasury bill rates, which can result in a net gain for the Government.

In 2002–03 the financial impact of holding Receiver General cash balances was a net cost of $12.4 million, compared to a net gain of $3.5 million for the prior fiscal year (see Chart 17). The change from gain to cost was due to shifts in the short-end of the yield curve from an inverted to a more normal upward sloping shape. This shift occurred in the last quarter of 2001–02 and persisted in 2002–03.

Chart 17

Cost (-) or Gain (+) of Carry for Cash Balances



Source: Bank of Canada.

Funding and Investment of Reserves

The main measures in the area of the funding and investment of reserves are the costs of the liabilities and the cost of carry on the asset/liability portfolio.

Liability Costs: In 2002–03 the sources of reserve funding were Canada bills and cross-currency swaps. Canada bills were issued, on average, at an all-in cost of US$LIBOR less 15-20 basis points—generally in line with funding levels of recent years.

In the case of cross-currency swaps, costs are measured in floating-rate terms (LIBOR). On average, in 2002–03, the Government raised floating-rate "swap funds" at US$LIBOR less 35 basis points, in line with recent years.

Carry

The carry on the foreign reserves is currently assessed by subtracting the interest paid on Canada's foreign currency liabilities from interest earned on the reserve assets (i.e., the net interest earned or paid) and expressing this value as a percentage of total assets held (see the 2002 *Annual Report to Parliament on the Operations of the Exchange Fund Account*, available at www.fin.gc.ca, for further information). The carry of the total Exchange Fund Account portfolio in 2002–03 is estimated at +1.5 basis points compared to zero basis points in 2001–02. In other words, the Government was able to hold reserves without incurring a cost to the taxpayer.

External Evaluations of Fund Management Policies and Activities

A means used by the Government to assess fund management effectiveness is program evaluation. The Department of Finance uses an external evaluation process to assess policies and operational decisions in the area of fund management in order to inform future decision making and contribute to public transparency and good governance. Independent evaluators are contracted to carry out the evaluations.

Two evaluations were undertaken in 2002–03, focusing on reserves management and the bond buyback program.

The evaluation of reserves management[3] looked at the program's objectives, roles and responsibilities and the costs and risks involved in the program. The evaluator noted the program compares well with that of other similar sovereigns. The main recommendation of the evaluation dealt with issues of risk management and performance measurement. The Department was largely in agreement with the recommendations, noting that work on improving performance measurement is underway.

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[3] "External Review of the Reserves Management Framework (2002)," available upon request from the Financial Markets Division, Department of Finance.

The evaluation of the bond buyback program[4] looked at the value and effectiveness of the program and its impact on the debt program, secondary markets and market participants. The evaluator noted the program has been successful and enjoys the support of market participants. The main recommendations dealt with issues such as the need to keep apprised of developments in other sovereigns and the benefits of working with market participants, particularly with respect to the selection of bonds to be targeted for future buyback operations. The departmental response was again favourable, noting that it monitors developments in the borrowing programs of other sovereigns and maintains a dialogue with market participants.

[4] "Evaluation of the Bond Buyback Program (2003)," available upon request from the Financial Markets Division, Department of Finance.

Annex 1—Managing the Debt Structure

This section describes the measures of the debt structure that the Government uses and presents the main analytical techniques and results supporting the decision to lower the fixed-rate share over five years, as announced in the February 2003 budget and subsequent 2003–04 *Debt Management Strategy*.

Measures of Debt Structure

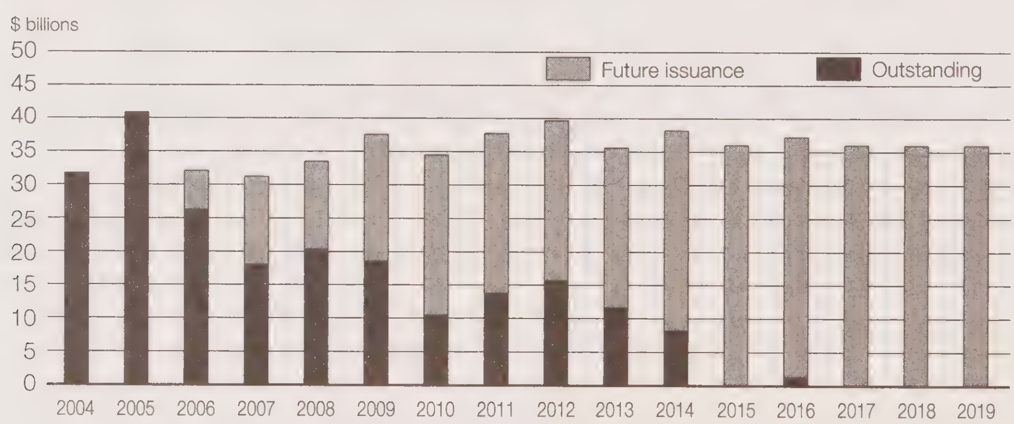
Debt managers commonly use a variety of indicators to characterize the composition of the debt and indicate how much of or how often the debt structure is exposed to interest rate variations.

Fixed-rate share: The fixed-rate share of the debt is computed as the proportion of interest-bearing debt having fixed rates—debt that does not mature or need to be re-priced within a year—relative to the total interest-bearing debt stock. The fixed-rate share has been used as the main operational target for a number of years, as it is intuitive and easy to compute.

Maturity profile: The Government monitors the maturity profile of the debt (i.e., the amount that matures, or comes due, in any given year) to limit its future refinancing risk. A well-distributed maturity profile reduces the risk that a relatively large proportion of the debt will mature and need to be refinanced in a period of higher interest rates.

The maturity profile of domestic government bonds is shown in Chart A1. Initiatives to regularize bond refinancing into predictable benchmark securities have led to a gradual smoothing out of the maturity profile of the bond stock. The recent adjustment of the size of the 10-year benchmark to maintain an annual benchmark cycle will contribute to maintaining a stable maturity profile in the future. The use of cash management buybacks also helps to reduce peaks in maturities within a year.

Chart A1
Maturity Profile of Domestic Bonds

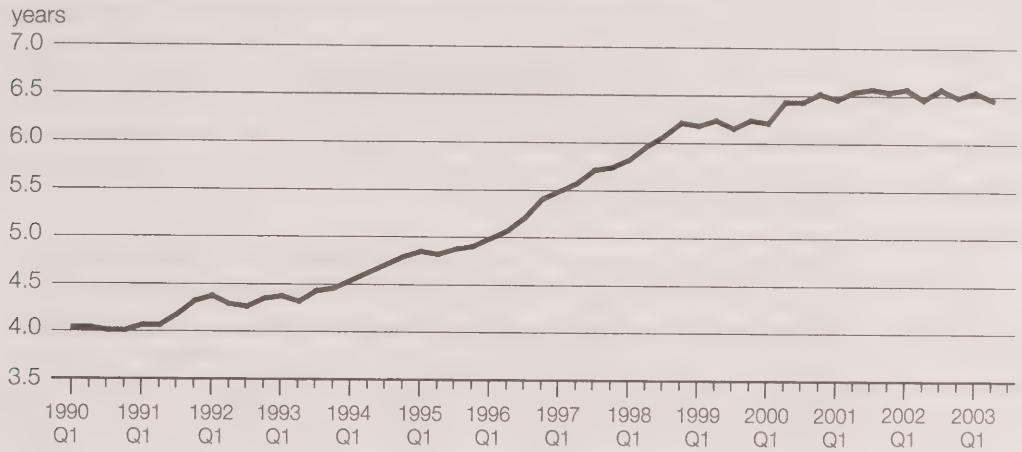


Note: Outstanding bonds as of March 2003. Projections assume future issuance remains near 2002–03 levels and excludes buybacks.
Source: Department of Finance.

Average term to maturity: The average term to maturity (ATM) is the average lifespan, measured in years, of the marketable instruments that make up the debt. ATM represents the average length of time before debt instruments mature and become subject to refinancing risk. A longer ATM means that debt instruments are rolled over less frequently, which implies less uncertainty regarding future debt costs.

The average term to maturity of marketable debt has stabilized at around 6½ years in recent years, having increased from roughly 4 years in 1990 (see Chart A2). With the announced change in debt structure, average term to maturity is expected to remain near current levels.

Chart A2
Average Term to Maturity of Marketable Debt



Source: Bank of Canada.

Duration: Duration is another measure of the average length of time before refinancing risk occurs and is widely used by other sovereign issuers. While ATM tracks only the time when the principal is repaid, duration considers the time value of all expected cash flows (coupon payments and principal repayments) through the life of debt instruments. From an issuer's perspective, a longer duration is associated with lower refinancing risk. At the end of March 2003, the Government's marketable debt had a duration of 4.5 years.[5]

[5] Duration is calculated according to the modified duration formula, and includes the effect of cross-currency and interest-rate swaps.

Analytical Techniques and Results

The primary goal of the analysis in 2002 was to assess whether a change in debt structure is appropriate, in light of recent improvements in the fiscal and macroeconomic environment. The risk and cost profiles of the two-thirds fixed-rate debt structure were compared with structures having a fixed-rate share that is 5 and 10 per cent lower. Results indicate cost savings could be expected over time by lowering the fixed-rate share, and risk exposure would be kept within tolerable risk levels. In light of these findings, the Government decided to lower the fixed-rate share target from two-thirds to 60 per cent over five years.

Stochastic simulation, based on the simulation of debt costs for a large number of interest rate scenarios, was used to assess the balance between the costs and risks of alternative debt structures. The Government takes a long-term strategic view in choosing a target debt structure to have reasonable and lasting cost stability under a range of potential interest rate environments. The decision to change the fixed-rate share target is not based on a particular interest rate outlook.

The analysis showed that a lower fixed-rate share would provide cost savings over a medium-term horizon and would not increase risk beyond that tolerated in the budgetary framework. Under either debt structure, there was a high degree of certainty (95 per cent probability) that debt costs in the next year would be within the Government's risk tolerance.

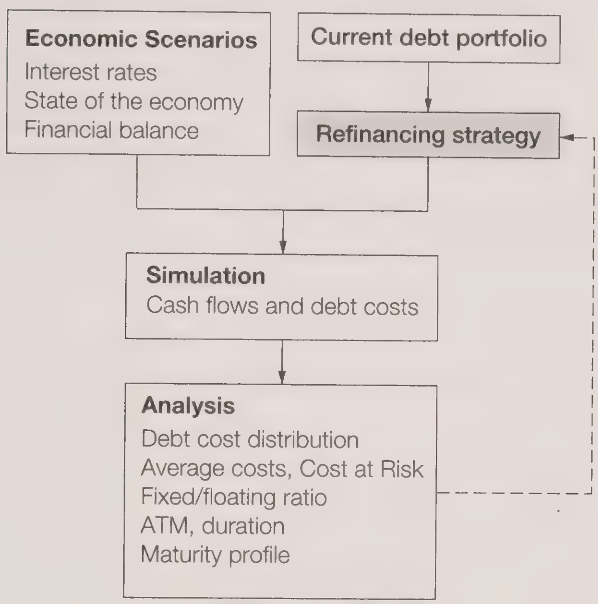
Compared to the current two-thirds debt structure, a lower fixed-rate structure is more exposed to adverse movements in interest rates. For example, a 100-basis-point increase in interest rates along the entire yield curve would raise net federal debt-servicing costs by $1.1 billion in the first year with a 60-per-cent fixed-rate structure, compared to $800 million for a two-thirds debt structure. By comparison, the impact of the same interest rate shock was estimated at $1.8 billion in the mid-1990s owing to a high debt level and an even lower fixed-rate share.

However, the analysis indicates that it is unlikely that the additional debt costs stemming from a severe interest rate shock would be disruptive to the budgetary framework. Over time, the additional costs resulting from an interest rate shock would be more than offset by the savings associated with a lower fixed-rate structure.

Modelling Framework

The model used for the analysis is illustrated in Figure A1. In addition to data on the existing debt and assumptions on future debt evolution, a large number of economic scenarios are generated (see box below) and an issuance strategy is designed. Cash flows and debt costs are then simulated for each scenario and results are extracted. The process is finally repeated for alternative financing strategies.

Figure A1
Debt Strategy Framework



Interest Rate Scenarios

Uncertainty surrounding future interest rates is the main source of risk in managing the Government's debt portfolio. Any empirical modelling of future debt charges requires future interest rate scenarios. Moreover, the quality of the analysis depends on the plausibility of the scenarios.

The term structure model used to develop scenarios is the two-factor Cox-Ingersoll-Ross (CIR) model[6]. The generated term structures take the various shapes observed historically: upward sloping, inverted and humped. The model is able to reproduce the general shape of the empirical average yield curves.

For the analysis, the model parameters have been selected to reproduce characteristics of interest rates observed over the 1994–2002 period. It is therefore assumed that the interest rate environment that prevailed over that period will continue over the next 10 years. It should be noted that the choice of the historical period is critical and, inevitably, subjective.

The CIR model is used to produce 10,000 term structure paths for a 10-year horizon. To summarize the properties of the generated interest rate scenarios, the sample mean and volatility of the 3-month and 10-year rates are presented in Table A1. The spread between 3-month and 10-year rates for the generated scenarios remains generally between 0 and 4 per cent, with an average of about 1.8 per cent, matching what was observed over the 1994–2002 period.

Table A1
Generated Interest Rate Scenarios Statistics

	Average	Volatility	95% range in year 5
3-month	4.8%	0.5%	2.5 to 8.0%
10-year	6.6%	0.3%	4.5 to 10.2%

Source: Department of Finance.

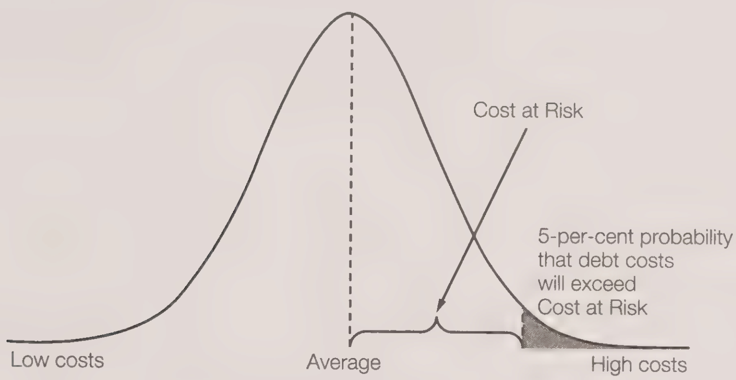
Experience has shown that results of the stochastic analysis are highly dependent on the interest rate model and the parameters used. While progress has been accomplished at improving the interest rate model, more work is required to ensure that the model captures adequately all dimensions of observed interest rate dynamics and that generated scenarios are realistic.

[6] See end of Annex 1 for more information on the CIR model.

Stochastic Analysis

The first technique employed is based on the simulation of a large number of future interest rate scenarios and the examination of their implications for debt costs. The statistical distribution of debt costs (see Figure A2) is compared for the three different debt structures.

Figure A2
Debt Cost Distribution



Cost at Risk (CaR) is one of the main tools used to present and interpret results of stochastic simulations. This measure is similar to the well-known Value at Risk measure used extensively throughout the financial community, but is based on debt costs rather than marked-to-market values. CaR is a measure based on the statistical distribution of debt charges that enables risk to be quantified in terms of the maximum costs that could occur with a 95-per-cent probability in a particular year. A number of useful variants in the definition are presented in Table A2.

Table A2
Cost at Risk Concepts

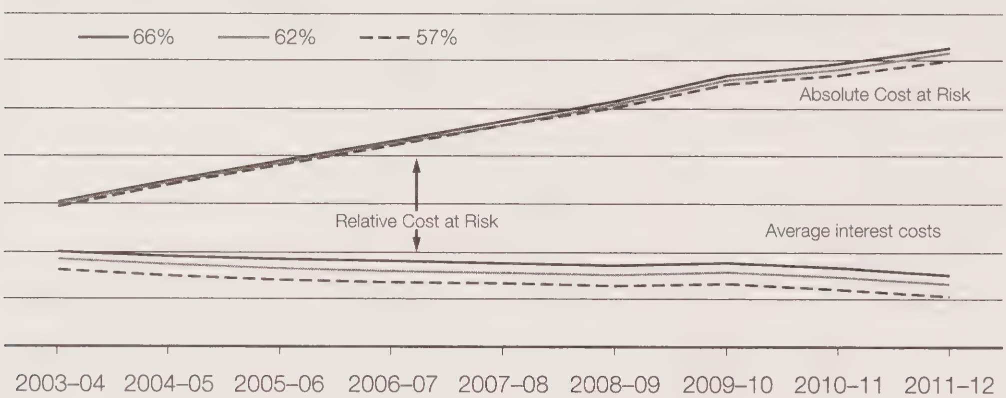
Measure	Interpretation
Absolute Cost at Risk	Maximum costs expected with a 95-per-cent probability.
Relative Cost at Risk	Maximum **increase** over average in-debt costs expected with a 95-per-cent probability.
Time-conditional Cost at Risk	Maximum unexpected increase in costs that is expected with a 95-per-cent probability, **from one year to the next**.

Results of the analysis are illustrated in Chart A3. As expected, average debt costs decline when the proportion of long-term bonds is decreased in the debt portfolio. Cost savings could be realized over the long term by reducing the fixed-rate share by 5 or 10 per cent.

The relative CaR measure is attractive to gauge risk because it can be directly compared to the level of prudence incorporated in the budget framework to analyze the risk that an unexpected increase in debt costs disrupts the budget plan. In other words, an appropriate debt structure could require that relative CaR remain inside the Government's risk tolerance limit.

Relative CaR rises when the fixed/floating ratio is decreased. A lower debt structure is slightly more sensitive to interest rate volatility. All three debt structures are highly likely to contain increases in debt costs without disrupting the budget plan over a one-year horizon.

Chart A3
Cost at Risk Results



From an economic perspective, absolute CaR may be more relevant, as it focuses on the potential level of costs instead of the risk of deviation from an average. Absolute CaR gives the maximum level of debt charges with a 95-per-cent probability; that is, there would be only a 5-per-cent chance that debt charges exceed the absolute CaR in a given year. When comparing two debt structures, absolute CaR considers the difference in expected debt costs in addition to risk as defined by relative CaR. This can be seen as a risk-adjusted measure of cost.

As shown in Chart A3, absolute CaR for the three debt structures is very similar. In other words, the risk that debt costs exceed the absolute CaR lines is virtually the same for each debt structure, while there is a potential for lower costs for the 62-per-cent and 57-per-cent debt structures. Lower running costs for these structures fully offset the increased relative CaR.

The farther out into the future they are forecast, the greater the uncertainty surrounding the level of debt charges. This results in an increasing relative CaR over years, as the proportion of debt refinanced at unknown interest rates rises.

While this is in the nature of long-term forecasts, it renders difficult the interpretation of results beyond a one- or two-year horizon. With time-conditional CaR, the horizon is fixed to one year by examining risk in a particular year using the year before as the basis, rather than the start of the simulation. This facilitates interpretation and improves the comparability of risk across years, particularly when the structure or the size of the portfolio changes. This is also consistent with the fiscal-planning process, where a new budget is prepared every year, based on updated forecasts in light of developing economic conditions. The time-conditional CaR is computed by obtaining the statistical distribution of changes in debt costs for each year. The difference between the 95th percentile and the mean for each individual year represents the maximum unexpected increase in costs that is expected with a 95-per-cent probability.

Stress Testing

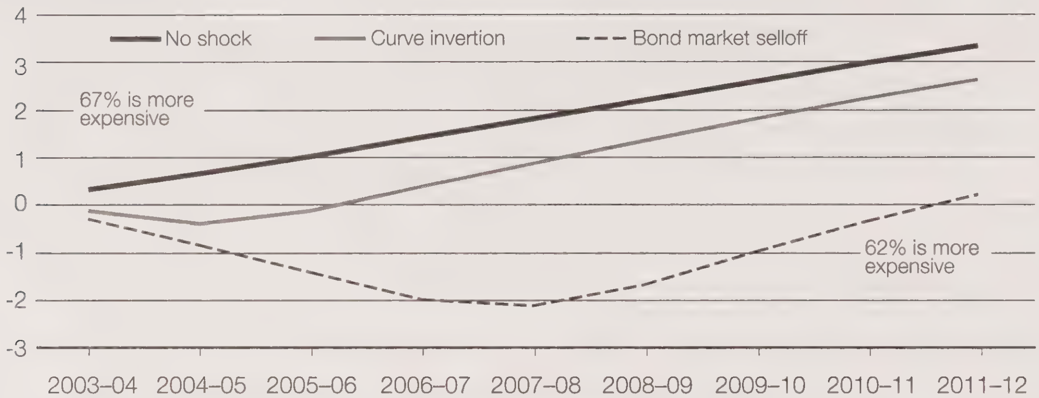
Experience has shown that quantitative results of stochastic simulations are very sensitive to assumptions employed for the dynamics of interest rates. Quantitative results thus need to be interpreted with caution. In addition, the technique may not capture adequately more extreme events. Therefore, scenario analysis remains an important tool to evaluate the impact of specific shocks on debt costs. In particular, stress testing allows considering worst-case scenarios (events that are highly unlikely but still possible). While it is not possible to determine exactly what would be the characteristics of such shocks or their probability, results provide useful insight to complement the stochastic analysis. Stress testing allows, in particular, the consideration of severe shocks on interest rates that could occur in periods of instability in financial markets.

A shock similar to the 1994 bond market selloff (in which 3-month rates increase by 5 per cent and 10-year rates rise by 2 per cent over a 15-month period, before gradually settling back to their previous level) would have a significant impact on debt costs for all three structures considered. But severe shocks can more easily be managed within the fiscal framework in the short run with a higher fixed-rate structure. The 62-per-cent and 57-per-cent debt structures would become marginally more expensive than the current two-thirds structure for a three-year period, but the advantage disappears over a longer-term horizon as the shock dissipates.

Chart A4 presents cumulative cost differences between the two-thirds structure and the 62-per-cent structure. Savings would accumulate quickly in the absence of interest rate shocks. Savings would be slightly negative in the event of the bond market selloff scenario, but quickly turn back into positive territory after three years. It would take a severe inversion that persists for a long period (e.g., the 3-month rate jumps by 6 per cent and the 10-year rate increases by 2 per cent over a 6-month period, and both rates remain at those levels for three years before abating back to their historical average over the following 2½ years) to make the higher debt structure attractive over a longer-term horizon, as illustrated by the severe curve inversion.

Chart A4

Cumulative Cost Differences Between 66% and 62%



In summary, only if unfavourable shocks of the magnitude of the bond market selloff occur on a frequent basis or if more severe shocks occur would the benefits of a two-thirds debt structure outweigh the higher running costs over the long term.

For more information on evaluating the debt structure ...

A number of working papers have been released to illustrate some of the techniques being developed by debt managers to evaluate the debt structure. Interested readers are invited to consult the papers, noting that working papers present work-in-progress and do not reflect official positions of the Department of Finance or the Bank of Canada.

- The two-factor Cox-Ingersoll-Ross model used to develop interest rate scenarios is described in Bolder, D. J. (2001) "Affine Term-Structure Models: Theory and Implementation," Bank of Canada, Working Paper 2001-15, www.bankofcanada.ca/en/res/wp01-15.htm.
- A simulation framework to explore a large number of financing strategies, using an enhanced scenario model, has been developed. Illustrative results, along with further refinements in simulation techniques and a discussion on risk measures, are presented in Bolder, D. J. (2003) "A Stochastic Simulation Framework for the Government of Canada's Debt Strategy," Bank of Canada, Working Paper 2003-10, www.bankofcanada.ca/en/res/2003/wp03-10.htm.
- The role that debt management decisions might have in fiscal planning is discussed in Georges, P. (2003) "Borrowing Short- or Long-Term: Does the Government Really Face a Trade-off?," Department of Finance, Working Paper 2003-16, www.fin.gc.ca/wp/2003-16e.html.

Annex 2

Glossary

Bank Rate: The minimum rate at which the Bank of Canada extends short-term advances to members of the Canadian Payments Association.

basis point: One-hundredth of a percentage point (0.01 per cent).

benchmark bond: Specific issue outstanding within each class of maturities. It is considered by the market to be the standard against which all other bonds issued in that class are evaluated.

bid: Price a buyer is willing to pay.

bid-offer spread: The difference between bid and offer prices. It is typically measured in basis points (hundredths of a per cent).

budgetary surplus: Occurs when government annual revenues exceed annual budgetary expenditures. A deficit is the shortfall between government revenues and budgetary expenditures.

Canada Premium Bond: A non-marketable security instrument issued by the Government of Canada, which is redeemable once a year on the anniversary date or during 30 days thereafter without penalty.

Canada Savings Bond: A non-marketable security instrument issued by the Government of Canada, which is redeemable on demand by the registered owner(s), and which, after the first three months, pays interest up to the end of the month prior to cashing.

Canadian Payments Association: A non-profit association created by an Act of Parliament in 1980 to establish and operate a national system for the clearing and settlement of cheques, electronic funds transfers and other payment items, and to plan the evolution of the national payments system.

cash management: Control by the Bank of Canada of settlement balances through increases or decreases in the amount supplied to Large Value Transfer System participants in relation to the amount demanded in order to reinforce the Target for the Overnight Rate.

compound interest bond; C-bond: A Canada Savings Bond or Canada Premium Bond on which interest accrues and is compounded annually to maturity or until redeemed.

Exchange Fund Account: A fund maintained by the Government of Canada for the purpose of promoting order and stability of the Canadian dollar in the foreign exchange market. This function is fulfilled by purchasing foreign exchange (selling Canadian dollars) when there is upward pressure on the value of the Canadian dollar and selling foreign exchange (buying Canadian dollars) when there is downward pressure on the currency.

financial requirement/source: Measures the difference between the cash coming in to the Government and the cash going out. In the case of a financial requirement, it is the amount of new borrowing required from outside lenders to meet the Government's financing needs in any given year.

foreign exchange reserves: Stocks of foreign exchange assets (e.g., interest-earning bonds) held by sovereign states to support the value of the domestic currency. Canada's foreign exchange reserves are held in a special account called the Exchange Fund Account.

Government of Canada securities auction: A process used for selling Government of Canada debt securities (mostly marketable bonds and Treasury bills) in which issues are sold by public tender to government securities distributors.

government securities distributors: The Government distributes Government of Canada Treasury bills and marketable bonds through a group of investment dealers and banks. The members of this group are called government securities distributors.

gross public debt: Total amount the Government owes. It consists of both market debt in the form of outstanding securities such as Treasury bills and Canada Savings Bonds, internal debt owed mainly to the superannuation fund for government employees, and other current liabilities.

inflation: A persistent rise over time in the average price of goods and services.

interest-bearing debt: Unmatured debt, or market debt, and the Government's liabilities to internally held accounts such as federal employees' pension plans.

Large Value Transfer System; LVTS: A Canadian Payments Association electronic system for the transfer of large-value or time-critical payments.

market debt: For debt management purposes, market debt is defined as the portion of debt that is funded in the public markets, and consists of marketable bonds, Treasury bills, retail debt (primarily Canada Savings Bonds), foreign currency denominated bonds and bills, as well as bonds issued to the Canada Pension Plan.

marketable bond: A Canadian government debt security that is non-cashable prior to maturity, but whose ownership may be transferred from one holder to another on the open market.

marketable debt: Market debt that is issued by the Government of Canada and sold via public tender or syndication. These issues can be traded between investors while outstanding.

monetary policy: A policy that seeks to improve the performance of the economy by regulating money supply and credit.

money market: The market in which short-term capital is raised, invested and traded using financial instruments such as Treasury bills, bankers' acceptances, commercial paper, and bonds maturing in one year or less.

net public debt: Consists of gross public debt net of financial assets.

non-market debt: Consists of the Government's internal debt, which is, for the most part, federal public sector pension liabilities and the Government's current liabilities (such as accounts payable, accrued liabilities, interest and payment of matured debt).

non-marketable debt: Market debt that is not tradable and that is issued to retail investors (Canada Savings Bonds and Canada Premium Bonds).

offer: Price at which a seller is willing to sell.

overnight rate; overnight financing rate; overnight money market (financing) rate; overnight lending rate: The rate at which major participants in the money market borrow and lend one-day funds to each other.

primary dealers: The core group of government securities distributors that maintain a certain threshold of activity in the market for Government of Canada securities. The primary dealer classification can be attained in either Treasury bills or marketable bonds, or both.

primary market: The market in which securities are initially sold or offered.

regular interest bond; R-bond: A Canada Savings Bond or Canada Premium Bond on which interest is paid annually by cheque or by direct deposit to maturity or until the bond is redeemed.

repo; repurchase agreement: A transaction in which a party sells a security and simultaneously agrees to repurchase it at a given price after a specified time.

sale and repurchase agreement; SRA: A transaction in which the Bank of Canada offers to sell Government of Canada securities to designated counterparties with an agreement to buy them back at a predetermined price the next business day; used to reinforce the Target for the Overnight Rate.

secondary market: The market in which previously issued securities are traded, as distinguished from the new issue or primary market.

special purchase and resale agreement; special PRA; SPRA: A transaction in which the Bank of Canada offers to purchase Government of Canada securities from designated counterparties with an agreement to sell them back at a predetermined price the next business day; used to reinforce the Target for the Overnight Rate.

Target for the Overnight Rate: The Bank of Canada's key policy interest rate. It serves as a signal to major participants in the money market as to what rate the Bank is aiming for in the market for overnight funds.

term structure of interest rates: The levels of interest rates from short- to long-term maturities.

turnover ratio: Volume of securities traded as a percentage of securities outstanding.

Annex 3

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Reference Tables

Reference Table I

Gross Public Debt, Outstanding Market Debt and Debt Charges

Fiscal years ending March 31	Gross public debt				Outstanding market debt			
	Outstanding	Fixed-rate portion[1]	Average fixed-rate portion[2]	Total debt charges	Outstanding	Fixed-rate portion	Total debt charges	Average interest rate
	($ billions)	(%)	(%)	($ billions)	($ billions)	(%)	($ billions)	(%)
1985–86	321.5	51.9	0	27.7	201.2	36.7	20.7	10.66
1986–87	357.2	50.9	0	28.7	228.6	36.9	21.5	9.34
1987–88	390.3	51.2	0	31.2	250.8	38.2	23.1	9.61
1988–89	423.8	49.6	0	35.5	276.3	37.2	26.5	10.82
1989–90	451.8	49.9	0	41.2	294.6	38.1	31.4	11.20
1990–91	490.3	50.4	0	45.0	323.9	38.5	34.3	10.72
1991–92	526.9	50.7	0	43.9	351.9	38.9	32.4	8.86
1992–93	566.0	50.4	0	41.3	382.7	39.0	29.4	7.88
1993–94	610.7	53.3	0	40.1	414.0	42.7	28.0	6.75
1994–95	651.6	55.1	0	44.2	441.0	44.4	31.4	7.97
1995–96	694.6	56.9	0	49.4	469.5	47.9	35.3	7.34
1996–97	711.9	61.7	0	47.3	476.9	53.8	33.0	6.66
1997–98	713.4	63.7	0	43.1	467.3	56.8	31.0	6.64
1998–99	717.7	64.5	66.6	43.3	460.4	58.5	30.8	6.70
1999–00	716.3	66.5	66.6	43.4	456.4	59.1	30.5	6.15
2000–01	715.0	67.8	67.6	43.9	446.4	60.5	30.7	6.11
2001–02	704.3	67.4	67.6	39.7	442.3	60.1	27.4	5.56
2002–03	700.1	65.8	65.8	37.3	439.8	61.2	25.2	5.32

[1] For interest-bearing debt as of March 31. Calculation methodology may vary slightly from year to year. The definition of interest-bearing debt has changed slightly in 2002–03 to reflect the adoption of the full accrual basis of accounting.

[2] Average over the year. Comparative figures for prior years are not available.

Sources: *Public Accounts of Canada*, *Bank of Canada Review*, Department of Finance estimates.

Reference Table II

Government of Canada Outstanding Market Debt

Fiscal years ending March 31	Payable in Canadian dollars					Payable in foreign currencies						Total market debt
	Treasury bills	Marketable bonds	Retail debt	CPP bonds	Total	Marketable bonds	Canada Bills	Canada Notes[1]	Standby drawings	Term loans	Total	
					(C$ millions)							
1977–78	11,295	21,645	18,036	84	51,060	181	0	0	850	0	1,031	51,664
1978–79	13,535	26,988	19,443	96	60,062	3,319	0	0	2,782	1,115	7,216	66,640
1979–80	16,325	33,387	18,182	113	68,007	3,312	0	0	359	1,030	4,701	72,021
1980–81	21,770	40,976	15,966	136	78,848	3,236	0	0	355	1,046	4,637	83,138
1981–82	19,375	43,605	25,108	154	88,242	3,867	0	0	0	550	4,417	93,167
1982–83	29,125	48,473	32,753	171	110,522	4,872	0	0	0	362	5,234	116,562
1983–84	41,700	56,976	38,403	189	137,268	4,306	0	0	510	398	5,214	142,901
1984–85	52,300	69,354	42,167	205	164,026	4,972	0	0	1,909	1,172	8,053	172,719
1985–86	61,950	81,163	44,607	445	188,165	9,331	0	0	2,233	2,247	13,811	201,229
1986–87	76,950	94,520	43,854	1,796	217,120	9,120	1,045	0	0	2,047	12,212	228,611
1987–88	81,050	103,899	52,558	2,492	239,999	8,438	1,045	0	0	2,257	11,740	250,809
1988–89	102,700	115,748	47,048	3,005	268,501	6,672	1,131	0	0	934	8,737	276,301
1989–90	118,550	127,681	40,207	3,072	289,510	4,364	1,446	0	0	0	5,810	294,562
1990–91	139,150	143,601	33,782	3,492	320,025	3,555	1,008	0	0	0	4,563	323,903
1991–92	152,300	158,059	35,031	3,501	348,891	3,535	0	0	0	0	3,535	351,885
1992–93	162,050	178,436	33,884	3,505	377,875	2,926	2,552	0	0	0	5,478	382,741
1993–94	166,000	203,373	30,866	3,497	403,736	5,019	5,649	0	0	0	10,668	413,975
1994–95	164,450	225,513	30,756	3,488	424,207	7,875	9,046	0	0	0	16,921	440,998
1995–96	166,100	252,411	30,801	3,478	452,790	9,514	6,986	310	0	0	16,810	469,547
1996–97	135,400	282,059	32,911	3,468	453,838	12,460	8,436	2,121	0	0	23,017	476,852
1997–98	112,300	293,987	30,302	3,456	440,045	14,590	9,356	3,176	0	0	27,122	467,291
1998–99	96,950	294,914	28,810	4,063	424,737	19,655	10,171	6,182	0	0	36,008	460,427
1999–00	99,850	293,250	27,115	3,427	423,642	21,464	6,008	5,168	0	0	32,640	456,406
2000–01	88,700	293,879	26,457	3,404	412,440	20,509	7,228	5,695	0	0	33,432	445,724
2001–02	94,200	292,910	24,229	3,386	414,725	19,652	3,355	4,405	0	0	27,412	442,137
2002–03	104,600	286,289	22,878	3,369	417,136	14,412	2,603	4,533	0	0	21,548	436,684

Note: Subcategorization of Government of Canada debt is in accordance with Bank of Canada reports, which may vary slightly from Public Accounts categories due to differences in classification methods. The total outstanding market debt may not equal the sum of the parts due to slight differences between the Bank of Canada's and Department of Finance's numbers.

[1] Includes EMTNs.

Sources: *Bank of Canada Review,* Department of Finance.

Reference Table III

Average Weekly Domestic Market Trading in Government of Canada Securities, April 2002 to March 2003

	Treasury bills	Marketable bonds					Total
		3 years and under	3 to 10 years	Over 10 years	Real return bonds	Total marketable bonds	
				($ millions)			
April 2002	20,488	27,240	31,334	9,985	102.38	68,661	89,149
May 2002	18,392	31,613	32,566	10,144	96	74,419	92,811
June 2002	22,640	34,571	33,222	6,638	404.53	74,835	97,475
July 2002	23,202	33,049	35,059	6,929	188.28	75,225	98,428
August 2002	20,063	36,767	37,578	6,182	248.73	80,776	100,840
September 2002	25,044	33,727	32,021	5,801	325	71,874	96,918
October 2002	24,558	30,153	37,050	6,238	427.02	73,867	98,425
November 2002	22,028	32,099	42,387	8,675	290.73	83,451	105,479
December 2002	21,298	23,963	24,317	5,028	247.63	53,555	74,853
January 2003	20,102	28,461	26,447	6,099	302.46	61,310	81,412
February 2003	21,958	39,075	37,891	8,311	349.53	85,626	107,584
March 2003	23,136	42,211	42,618	9,038	766	94,633	117,769

Source: Bank of Canada, *Banking and Financial Statistics.*

Reference Table IV

Distribution of Domestic Holdings of Government of Canada Securities

PART A —Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
				($ millions)					
1976	17,932	395	8,242	8,666	716	1,436	2,273	730	40,390
1977	20,277	321	10,268	9,601	1,048	2,271	3,114	1,014	47,914
1978	22,723	403	12,001	9,896	1,537	3,738	4,017	1,721	56,036
1979	23,144	374	13,656	10,156	1,684	6,716	4,103	2,878	62,711
1980	24,253	555	15,858	10,002	2,771	9,274	5,561	4,248	72,522
1981	33,425	520	17,100	10,003	2,452	10,569	5,342	4,194	83,605
1982	42,320	2,267	15,428	11,233	3,288	13,151	9,177	4,654	101,518
1983	50,306	5,502	16,859	15,107	5,551	17,816	9,984	5,321	126,446
1984	60,748	6,783	17,184	15,164	4,887	24,039	11,978	7,166	147,949
1985	74,331	7,387	15,668	15,198	5,706	31,068	15,086	10,106	174,550
1986	71,073	6,259	18,374	17,779	7,277	34,887	18,414	11,293	185,356
1987	83,732	8,591	20,201	16,012	6,400	38,870	19,547	13,918	207,271
1988	86,591	8,634	20,606	21,115	7,492	42,460	19,028	17,186	223,112
1989	81,566	11,402	21,133	20,804	9,854	48,037	23,950	17,840	234,586
1990	80,079	11,797	20,325	24,224	10,460	52,984	26,051	19,574	245,494
1991	72,945	11,580	22,370	35,792	12,091	57,846	33,054	21,015	266,693
1992	70,930	13,696	22,607	44,555	12,428	62,042	39,396	20,222	285,876
1993	61,221	10,359	23,498	60,242	11,229	69,917	45,321	18,397	300,184
1994	52,842	12,039	24,902	70,063	9,992	78,545	52,847	24,967	326,197
1995	48,867	12,048	23,590	76,560	10,947	87,467	59,044	26,324	344,847
1996	46,187	10,013	25,556	74,789	10,952	90,174	71,514	24,828	354,013
1997	39,924	10,470	27,198	67,715	7,054	94,991	79,445	25,509	352,306
1998	33,537	8,525	27,911	66,375	6,659	99,687	79,895	28,174	350,763
1999	37,118	9,290	29,075	54,080	7,944	108,656	81,257	28,394	355,814
2000	33,259	9,062	31,726	58,269	2,842	108,752	73,911	30,280	348,101
2001	33,979	7,643	37,204	65,396	3,561	99,744	76,482	34,341	358,350
2002	22,860	8,417	38,859	66,057	3,307	97,463	81,521	33,436	351,920

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART B —Treasury Bills, Canada Bills, Bonds,[1] Canada Savings Bonds and Canada Premium Bonds

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	44.40	0.98	20.41	21.46	1.77	3.56	5.63	1.81	100.00
1977	42.32	0.67	21.43	20.04	2.19	4.74	6.50	2.12	100.00
1978	40.55	0.72	21.42	17.66	2.74	6.67	7.17	3.07	100.00
1979	36.91	0.60	21.78	16.19	2.69	10.71	6.54	4.59	100.00
1980	33.44	0.77	21.87	13.79	3.82	12.79	7.67	5.86	100.00
1981	39.98	0.62	20.45	11.96	2.93	12.64	6.39	5.02	100.00
1982	41.69	2.23	15.20	11.07	3.24	12.95	9.04	4.58	100.00
1983	39.78	4.35	13.33	11.95	4.39	14.09	7.90	4.21	100.00
1984	41.06	4.58	11.61	10.25	3.30	16.25	8.10	4.84	100.00
1985	42.58	4.23	8.98	8.71	3.27	17.80	8.64	5.79	100.00
1986	38.34	3.38	9.91	9.59	3.93	18.82	9.93	6.09	100.00
1987	40.40	4.14	9.75	7.73	3.09	18.75	9.43	6.71	100.00
1988	38.81	3.87	9.24	9.46	3.36	19.03	8.53	7.70	100.00
1989	34.77	4.86	9.01	8.87	4.20	20.48	10.21	7.60	100.00
1990	32.62	4.81	8.28	9.87	4.26	21.58	10.61	7.97	100.00
1991	27.35	4.34	8.39	13.42	4.53	21.69	12.39	7.88	100.00
1992	24.81	4.79	7.91	15.59	4.35	21.70	13.78	7.07	100.00
1993	20.39	3.45	7.83	20.07	3.74	23.29	15.10	6.13	100.00
1994	16.20	3.69	7.63	21.48	3.06	24.08	16.20	7.65	100.00
1995	14.17	3.49	6.84	22.20	3.17	25.36	17.12	7.63	100.00
1996	13.05	2.83	7.22	21.13	3.09	25.47	20.20	7.01	100.00
1997	11.33	2.97	7.72	19.22	2.00	26.96	22.55	7.24	100.00
1998	9.56	2.43	7.96	18.92	1.90	28.42	22.78	8.03	100.00
1999	10.43	2.61	8.17	15.20	2.23	30.54	22.84	7.98	100.00
2000	9.55	2.60	9.11	16.74	0.82	31.24	21.23	8.70	100.00
2001	9.48	2.13	10.38	18.25	0.99	27.83	21.34	9.58	100.00
2002	6.50	2.39	11.04	18.77	0.94	27.69	23.16	9.50	100.00

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART C —Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	171	125	1,964	4,219	52	44	515	193	7,283
1977	394	136	2,461	4,949	143	98	1,020	311	9,512
1978	576	198	3,567	5,517	193	261	1,554	519	12,385
1979	785	165	4,345	6,690	65	245	1,550	843	14,688
1980	1,493	288	5,317	7,500	619	460	2,431	1,512	19,620
1981	1,019	369	5,431	8,597	343	560	2,187	1,082	19,588
1982	1,237	1,930	2,483	10,034	1,357	1,244	5,008	1,199	24,492
1983	3,766	5,146	2,595	12,879	3,180	2,587	5,376	1,286	36,815
1984	7,454	6,275	3,515	12,997	2,792	3,876	6,544	2,498	45,951
1985	13,340	6,517	3,985	12,629	3,651	3,924	8,129	4,136	56,311
1986	16,158	4,875	7,967	15,161	4,709	3,592	10,164	3,416	66,042
1987	17,733	7,232	9,682	11,498	3,725	4,806	9,589	5,002	69,267
1988	20,213	7,414	9,945	15,224	5,614	7,648	9,133	7,726	82,917
1989	29,156	9,668	11,124	17,410	8,116	9,664	12,908	9,251	107,297
1990	36,461	10,756	10,574	17,841	8,976	11,737	13,298	9,388	119,031
1991	30,423	10,437	13,093	24,382	9,089	12,386	17,636	10,417	127,863
1992	32,901	11,254	14,634	27,989	9,646	13,639	19,907	8,726	138,696
1993	27,459	9,657	16,876	29,901	9,222	17,085	22,336	7,151	139,687
1994	17,562	8,499	18,973	30,415	6,879	14,376	22,021	10,631	129,356
1995	16,296	9,204	18,298	30,865	7,760	15,315	25,183	10,603	133,524
1996	10,474	8,285	17,593	23,470	5,493	13,520	32,752	6,264	117,851
1997	5,966	6,858	14,233	19,448	3,133	8,944	32,653	3,803	95,038
1998	1,291	6,215	10,729	16,713	2,392	4,529	32,508	3,578	77,955
1999	8,539	6,662	8,584	9,814	3,234	8,128	36,932	3,497	85,390
2000	7,568	6,735	8,090	6,188	685	7,222	31,087	5,108	72,683
2001	8,744	6,990	11,427	9,969	675	10,401	37,154	6,838	92,198
2002	551	5,894	11,639	18,869	708	12,768	40,087	7,115	97,631

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART D—Treasury Bills and Canada Bills

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	2.35	1.72	26.97	57.93	0.71	0.60	7.07	2.65	100.00
1977	4.14	1.43	25.87	52.03	1.50	1.03	10.72	3.27	100.00
1978	4.65	1.60	28.80	44.55	1.56	2.11	12.55	4.19	100.00
1979	5.34	1.12	29.58	45.55	0.44	1.67	10.55	5.74	100.00
1980	7.61	1.47	27.10	38.23	3.15	2.34	12.39	7.71	100.00
1981	5.20	1.88	27.73	43.89	1.75	2.86	11.16	5.52	100.00
1982	5.05	7.88	10.14	40.97	5.54	5.08	20.45	4.90	100.00
1983	10.23	13.98	7.05	34.98	8.64	7.03	14.60	3.49	100.00
1984	16.22	13.66	7.65	28.28	6.08	8.44	14.24	5.44	100.00
1985	23.69	11.57	7.08	22.43	6.48	6.97	14.44	7.34	100.00
1986	24.47	7.38	12.06	22.96	7.13	5.44	15.39	5.17	100.00
1987	25.60	10.44	13.98	16.60	5.38	6.94	13.84	7.22	100.00
1988	24.38	8.94	11.99	18.36	6.77	9.22	11.01	9.32	100.00
1989	27.17	9.01	10.37	16.23	7.56	9.01	12.03	8.62	100.00
1990	30.63	9.04	8.88	14.99	7.54	9.86	11.17	7.89	100.00
1991	23.79	8.16	10.24	19.07	7.11	9.69	13.79	8.15	100.00
1992	23.72	8.11	10.55	20.18	6.95	9.83	14.35	6.29	100.00
1993	19.66	6.91	12.08	21.41	6.60	12.23	15.99	5.12	100.00
1994	13.58	6.57	14.67	23.51	5.32	11.11	17.02	8.22	100.00
1995	12.20	6.89	13.70	23.12	5.81	11.47	18.86	7.94	100.00
1996	8.89	7.03	14.93	19.91	4.66	11.47	27.79	5.32	100.00
1997	6.28	7.22	14.98	20.46	3.30	9.41	34.36	4.00	100.00
1998	1.66	7.97	13.76	21.44	3.07	5.81	41.70	4.59	100.00
1999	10.00	7.80	10.05	11.49	3.79	9.52	43.25	4.10	100.00
2000	10.41	9.27	11.13	8.51	0.94	9.94	42.77	7.03	100.00
2001	9.48	7.58	12.39	10.81	0.73	11.28	40.30	7.42	100.00
2002	0.56	6.04	11.92	19.33	0.73	13.08	41.06	7.29	100.00

Reference Table IV *(cont'd)*
Distribution of Domestic Holdings of Government of Canada Securities
PART E—Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					($ millions)				
1976	17,761	270	6,278	4,447	664	1,392	1,758	537	33,107
1977	19,883	185	7,807	4,652	905	2,173	2,094	703	38,402
1978	22,147	205	8,434	4,379	1,344	3,477	2,463	1,202	43,651
1979	22,359	209	9,311	3,466	1,619	6,471	2,553	2,035	48,023
1980	22,760	267	10,541	2,502	2,152	8,814	3,130	2,736	52,902
1981	32,406	151	11,669	1,406	2,109	10,009	3,155	3,112	64,017
1982	41,083	337	12,945	1,199	1,931	11,907	4,169	3,455	77,026
1983	46,540	356	14,264	2,228	2,371	15,229	4,608	4,035	89,631
1984	53,294	508	13,669	2,167	2,095	20,163	5,434	4,668	101,998
1985	60,991	870	11,683	2,569	2,055	27,144	6,957	5,970	118,239
1986	54,915	1,384	10,407	2,618	2,568	31,295	8,250	7,877	119,314
1987	65,999	1,359	10,519	4,514	2,675	34,064	9,958	8,916	138,004
1988	66,378	1,220	10,661	5,891	1,878	34,812	9,895	9,460	140,195
1989	52,410	1,734	10,009	3,394	1,738	38,373	11,042	8,589	127,289
1990	43,618	1,041	9,751	6,383	1,484	41,247	12,753	10,186	126,463
1991	42,522	1,143	9,277	11,410	3,002	45,460	15,418	10,598	138,830
1992	38,029	2,442	7,973	16,566	2,782	48,403	19,489	11,496	147,180
1993	33,762	702	6,622	30,341	2,007	52,832	22,985	11,246	160,497
1994	35,280	3,540	5,929	39,648	3,113	64,169	30,826	14,336	196,841
1995	32,571	2,844	5,292	45,695	3,187	72,152	33,861	15,721	211,323
1996	35,713	1,728	7,963	51,319	5,459	76,654	38,762	18,564	236,162
1997	33,958	3,612	12,965	48,267	3,921	86,047	46,792	21,706	257,268
1998	32,246	2,310	17,182	49,662	4,267	95,158	47,387	24,596	272,808
1999	28,579	2,628	20,491	44,266	4,710	100,528	44,325	24,897	270,424
2000	25,691	2,327	23,636	52,081	2,157	101,530	42,824	25,172	275,418
2001	25,235	653	25,777	55,427	2,886	89,343	39,328	27,503	266,152
2002	22,309	2,523	27,220	47,188	2,599	84,695	41,434	26,321	254,289

Reference Table IV *(cont'd)*

Distribution of Domestic Holdings of Government of Canada Securities

PART F—Bonds[1]

Year end	Persons and unincorporated businesses	Non-financial corporations	Bank of Canada	Chartered banks	Quasi-banks[2]	Life insurance companies and pension funds	Public and other financial institutions[3]	All levels of government[4]	Total[5]
					(%)				
1976	53.65	0.82	18.96	13.43	2.01	4.20	5.31	1.62	100.00
1977	51.78	0.48	20.33	12.11	2.36	5.66	5.45	1.83	100.00
1978	50.74	0.47	19.32	10.03	3.08	7.97	5.64	2.75	100.00
1979	46.56	0.44	19.39	7.22	3.37	13.47	5.32	4.24	100.00
1980	43.02	0.50	19.93	4.73	4.07	16.66	5.92	5.17	100.00
1981	50.62	0.24	18.23	2.20	3.29	15.63	4.93	4.86	100.00
1982	53.34	0.44	16.81	1.56	2.51	15.46	5.41	4.49	100.00
1983	51.92	0.40	15.91	2.49	2.65	16.99	5.14	4.50	100.00
1984	52.25	0.50	13.40	2.12	2.05	19.77	5.33	4.58	100.00
1985	51.58	0.74	9.88	2.17	1.74	22.96	5.88	5.05	100.00
1986	46.03	1.16	8.72	2.19	2.15	26.23	6.91	6.60	100.00
1987	47.82	0.98	7.62	3.27	1.94	24.68	7.22	6.46	100.00
1988	47.35	0.87	7.60	4.20	1.34	24.83	7.06	6.75	100.00
1989	41.17	1.36	7.86	2.67	1.37	30.15	8.67	6.75	100.00
1990	34.49	0.82	7.71	5.05	1.17	32.62	10.08	8.05	100.00
1991	30.63	0.82	6.68	8.22	2.16	32.75	11.11	7.63	100.00
1992	25.84	1.66	5.42	11.26	1.89	32.89	13.24	7.81	100.00
1993	21.04	0.44	4.13	18.90	1.25	32.92	14.32	7.01	100.00
1994	17.92	1.80	3.01	20.14	1.58	32.60	15.66	7.28	100.00
1995	15.41	1.35	2.50	21.62	1.51	34.14	16.02	7.44	100.00
1996	15.12	0.73	3.37	21.73	2.31	32.46	16.41	7.86	100.00
1997	13.20	1.40	5.04	18.76	1.52	33.45	18.19	8.44	100.00
1998	11.82	0.85	6.30	18.20	1.56	34.88	17.37	9.02	100.00
1999	10.57	0.97	7.58	16.37	1.74	37.17	16.39	9.21	100.00
2000	9.33	0.84	8.58	18.91	0.78	36.86	15.55	9.14	100.00
2001	9.48	0.25	9.69	20.83	1.08	33.57	14.78	10.33	100.00
2002	8.77	0.99	10.70	18.56	1.02	33.31	16.29	10.35	100.00

Note: Because of timing and valuation differences, *The National Balance Sheet Accounts* data contained in this table are not necessarily on the same basis as other data elsewhere in this publication (most of the data in this report are on a par-value basis—that is, outstanding securities are valued at par). For this reason, although the two sets of data yield very similar information, the data in this table are not strictly comparable with other data in this publication.

[1] Includes bonds denominated in foreign currencies.

[2] Includes Quebec savings banks, credit unions and caisses populaires, trust companies and mortgage loan companies.

[3] Includes investment dealers, mutual funds, property and casualty insurance companies, sales, finance and consumer loan companies, accident and sickness branches of life insurance companies, other private financial institutions (not elsewhere included), federal public financial institutions, and provincial financial institutions.

[4] Includes Government of Canada holdings of its own debt, provincial, municipal and hospital holdings, and holdings of the Canada Pension Plan and the Quebec Pension Plan.

[5] May not add due to rounding.

Source: Statistics Canada, *The National Balance Sheet Accounts*.

Reference Table V
Non-Resident (Direct) Holdings of Government of Canada Debt

As at March 31	Marketable bonds[1]	Treasury bills and Canada Bills	Total	Total as per cent of total market debt
		(C$ billions)		(%)
1979	5.0	0.9	5.9	8.9
1980	5.6	0.7	6.3	8.7
1981	6.8	1.1	7.9	9.5
1982	8.8	1.1	9.9	10.6
1983	10.0	1.6	11.6	10.0
1984	10.3	2.6	12.9	9.0
1985	14.5	4.6	19.1	11.1
1986	22.1	3.0	25.1	12.5
1987	30.3	4.7	35.0	15.3
1988	33.0	9.3	42.3	16.9
1989	41.3	15.7	57.0	20.6
1990	49.9	13.3	63.2	21.5
1991	57.6	16.1	73.7	22.8
1992	63.6	23.0	86.6	24.6
1993	80.1	28.3	108.4	28.3
1994	79.3	34.0	113.3	27.4
1995	73.7	39.2	112.9	25.6
1996	84.1	37.7	121.8	25.9
1997	91.8	27.7	119.4	25.0
1998	94.3	20.0	114.3	24.5
1999	86.6	19.4	106.0	23.0
2000	85.7	14.2	99.9	21.9
2001	83.5	10.5	94.0	21.1
2002	74.0	7.4	81.4	18.4
2003	80.7	8.5	89.2	20.3

Note: Numbers may not add due to rounding.

[1] Includes bonds denominated in foreign currencies.

Source: Statistics Canada, *Canada's International Transactions in Securities.*

Reference Table VI

Fiscal 2002–03 Treasury Bill Program

Settlement	Maturing					New issues					Net increment			Average tender yields			
Date	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
	($ millions)													(%)			
04-Apr-2002	–	–	–	–	–	–	–	–	–	–	–	–	94,200				
11-Apr-2002	–	4,100	3,500	–	7,600	–	4,400	1,800	1,800	8,000	400	400	94,600		2.38	2.68	3.36
18-Apr-2002	–	–	–	–	–	–	–	–	–	–	–	400	94,600				
25-Apr-2002	–	4,400	–	3,200	7,600	3,000	4,700	1,900	1,900	11,500	3,900	4,300	98,500	2.27	2.41	2.72	3.37
02-May-2002	–	–	–	–	–	–	–	–	–	–	–	4,300	98,500				
09-May-2002	–	4,400	3,600	–	8,000	–	4,700	1,900	1,900	8,500	500	4,800	99,000		2.47	2.67	3.17
16-May-2002	–	–	–	–	–	–	–	–	–	–	–	4,800	99,000				
23-May-2002	–	4,400	–	2,900	7,300	–	4,700	1,900	1,900	8,500	1,200	6,000	100,200		2.62	2.91	3.53
30-May-2002	–	–	–	–	–	2,000	–	–	–	2,000	2,000	8,000	102,200	2.43			
06-Jun-2002	300	4,400	3,500	–	10,900	1,500	4,700	1,900	1,900	10,000	-900	7,100	101,300	2.49	2.67	2.92	3.42
13-Jun-2002	–	–	–	–	–	–	–	–	–	–	–	7,100	101,300				
20-Jun-2002	–	4,100	–	2,800	6,900	–	4,700	1,900	1,900	8,500	1,600	8,700	102,900		2.74	2.98	3.38
27-Jun-2002	–	–	–	–	–	–	–	–	–	–	–	8,700	102,900				
04-Jul-2002	350	4,100	3,500	–	11,100	–	4,400	1,800	1,800	8,000	-3,100	5,600	99,800		2.75	2.94	3.27
11-Jul-2002	–	–	–	–	–	–	–	–	–	–	–	5,600	99,800				
18-Jul-2002	–	4,400	–	3,100	7,500	–	4,400	1,800	1,800	8,000	500	6,100	100,300		2.83	2.96	3.23
25-Jul-2002	–	–	–	–	–	750	–	–	–	750	750	6,850	101,050	2.69			
01-Aug-2002	750	4,700	3,600	–	9,050	–	4,700	1,900	1,900	8,500	-550	6,300	100,500		2.85	2.98	3.16
08-Aug-2002	–	–	–	–	–	–	–	–	–	–	–	6,300	100,500				
15-Aug-2002	–	4,700	–	3,200	7,900	–	4,400	1,800	1,800	8,000	100	6,400	100,600		2.81	2.89	2.98
22-Aug-2002	–	–	–	–	–	–	–	–	–	–	–	6,400	100,600				
29-Aug-2002	–	4,700	3,500	–	8,200	1,250	4,400	1,800	1,800	9,250	1,050	7,450	101,650	2.82	2.30	3.14	3.35
05-Sep-2002	–	–	–	–	–	–	–	–	–	–	–	7,450	101,650				
12-Sep-2002	125	4,700	–	3,300	9,250	–	4,400	1,800	1,800	8,000	-1,250	6,200	100,400		2.83	3.02	3.24
19-Sep-2002	–	–	–	–	–	–	–	–	–	–	–	6,200	100,400				
26-Sep-2002	–	4,700	3,500	–	8,200	2,000	4,400	1,800	1,800	10,000	1,800	8,000	102,200	2.68	2.83	2.92	3.07

Reference Table VI *(cont'd)*
Fiscal 2002–03 Treasury Bill Program

Settlement	Maturing					New issues					Net increment			Average tender yields			
Date	CMB[1]	3 mo	6 mo	12 mo	Total	CMB[1]	3 mo	6 mo	12 mo	Total	Total	Cumulative	O/S[2]	CMB[1]	3 mo	6 mo	12 mo
	($ millions)													(%)			
03-Oct-2002	–	–	–	–	–	–	–	–	–	–	–	8,000	102,200				
10-Oct-2002	2,000	4,400	–	3,500	9,900	–	4,700	1,900	1,900	8,500	-1,400	6,600	100,800		2.81	2.92	3.11
17-Oct-2002	–	–	–	–	–	–	–	–	–	–	–	6,600	100,800				
24-Oct-2002	–	4,400	3,800	–	8,200	2,750	4,700	1,900	1,900	11,250	3,050	9,650	103,850	2.70	2.81	2.93	3.20
31-Oct-2002	–	–	–	–	–	–	–	–	–	–	–	9,650	103,850				
07-Nov-2002	–	4,700	–	3,600	8,300	–	5,000	2,000	2,000	9,000	700	10,350	104,550		2.73	2.82	2.94
14-Nov-2002	–	–	–	–	–	–	–	–	–	–	–	10,350	104,550				
21-Nov-2002	–	4,400	3,800	–	8,200	–	4,700	1,900	1,900	8,500	300	10,650	104,850		2.73	2.82	2.96
28-Nov-2002	–	–	–	–	–	1,750	–	–	–	1,750	1,750	12,400	106,600	2.70			
05-Dec-2002	2,750	4,400	–	3,500	10,650	–	4,400	1,800	1,800	8,000	-2,650	9,750	103,950		2.73	2.83	3.07
12-Dec-2002	–	–	–	–	–	–	–	–	–	–	–	9,750	103,950				
19-Dec-2002	–	4,400	3,700	–	8,100	1,000	4,100	1,700	1,700	8,500	400	10,150	104,350	2.69	2.70	2.81	2.99
26-Dec-2002	–	–	–	–	–	–	–	–	–	–	–	10,150	104,350				
02-Jan-2003	2,750	4,400	–	3,500	10,650	–	3,800	1,600	1,600	7,000	-3,650	6,500	100,700		2.67	2.78	2.89
09-Jan-2003	–	–	–	–	–	–	–	–	–	–	–	6,500	100,700				
16-Jan-2003	–	4,700	3,700	–	8,400	–	4,100	1,700	1,700	7,500	-900	5,600	99,800		2.69	2.82	2.97
23-Jan-2003	–	–	–	–	–	3,000	–	–	–	3,000	3,000	8,600	102,800	2.73			
30-Jan-2003	–	4,700	–	3,600	8,300	–	4,700	1,900	1,900	8,500	200	8,800	103,000		2.81	2.30	3.24
06-Feb-2003	–	–	–	–	–	–	–	–	–	–	–	8,800	103,000				
13-Feb-2003	3,000	5,000	3,600	–	11,600	–	4,100	1,700	1,700	7,500	-4,100	4,700	98,900		2.83	2.94	3.25
20-Feb-2003	–	–	–	–	–	750	–	–	–	750	750	5,450	99,650	2.65			
27-Feb-2003	–	4,700	–	3,500	8,200	–	4,700	1,900	1,900	8,500	300	5,750	99,950		2.86	3.03	3.28
06-Mar-2003	–	–	–	–	–	–	–	–	–	–	–	5,750	99,950				
13-Mar-2003	750	4,400	3,600	–	8,750	–	4,700	1,900	1,900	8,500	-250	5,500	99,700		3.00	3.19	3.39
20-Mar-2003	–	–	–	–	–	2,500	–	–	–	2,500	2,500	8,000	102,200	2.93			
27-Mar-2003	–	4,100	–	3,500	7,600	1,500	4,700	1,900	1,900	10,000	2,400	10,400	104,600	2.99	3.14	3.37	3.66
Total	**19,750**	**116,500**	**46,900**	**43,200**	**226,350**	**23,750**	**117,400**	**47,800**	**47,800**	**236,750**	**10,400**	**363,850**	**5,262,250**				

[1] Cash management bill.

[2] Outstanding.

Source: Bank of Canada.

Reference Table VII

Fiscal 2002–03 Treasury Bill Auction Results

Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail	Auction date	Term	Issue amount	Average price	Average yield	Bid coverage	Tail
	(months)	($ millions)	($)	(%)		(basis points)		(months)	($ millions)	($)	(%)		(basis points)
09-Apr-02	12	1,800	95.840	4.527	1.565	1.1	08-Oct-02	12	1,900	98.591	2.866	1.969	1.1
09-Apr-02	3	4,400	98.808	4.493	1.452	1.7	08-Oct-02	3	4,700	99.213	2.955	1.842	0.9
09-Apr-02	6	1,800	97.960	4.525	2.021	1.0	08-Oct-02	6	1,900	97.200	2.889	1.919	0.7
23-Apr-02	12	1,900	95.767	4.432	1.733	1.3	22-Oct-02	12	1,900	99.323	2.540	1.852	1.7
23-Apr-02	3	4,700	97.871	4.363	1.939	1.0	22-Oct-02	3	4,700	98.848	2.532	2.306	0.6
23-Apr-02	6	1,900	98.830	4.410	1.544	1.8	22-Oct-02	6	1,900	97.543	2.627	2.013	1.2
07-May-02	12	1,900	98.066	4.284	1.831	1.1	05-Nov-02	12	2,000	97.739	2.320	2.086	0.8
07-May-02	3	4,700	98.855	4.313	1.942	0.7	05-Nov-02	3	5,000	99.391	2.281	1.805	0.9
07-May-02	6	1,900	95.969	4.380	2.095	0.4	05-Nov-02	6	2,000	98.881	2.269	1.989	0.8
21-May-02	12	1,900	95.617	4.597	1.745	1.3	19-Nov-02	12	1,900	97.620	2.543	1.514	1.7
21-May-02	3	4,700	97.828	4.453	2.028	0.7	19-Nov-02	3	4,700	99.411	2.207	1.753	1.3
21-May-02	6	1,900	98.832	4.401	1.862	0.9	19-Nov-02	6	1,900	98.948	2.309	2.088	0.9
04-Jun-02	12	1,900	95.863	4.501	1.916	0.9	03-Dec-02	12	1,800	99.453	2.048	1.831	0.9
04-Jun-02	3	4,700	98.854	4.317	1.851	0.7	03-Dec-02	3	4,400	98.987	2.052	1.896	0.6
04-Jun-02	6	1,900	98.025	4.378	2.420	0.2	03-Dec-02	6	1,800	97.712	2.348	1.929	0.5
18-Jun-02	12	1,900	95.804	4.392	2.212	0.8	17-Dec-02	12	1,700	97.797	2.349	1.814	0.6
18-Jun-02	3	4,700	98.874	4.242	2.221	0.5	17-Dec-02	3	4,100	99.467	1.996	2.065	0.4
18-Jun-02	6	1,900	97.906	4.289	2.220	0.4	17-Dec-02	6	1,700	99.061	2.059	1.942	0.5
02-Jul-02	12	1,800	95.750	4.629	1.891	0.4	30-Dec-02	12	1,600	99.490	1.911	1.799	0.9
02-Jul-02	3	4,400	98.842	4.364	1.909	0.5	30-Dec-02	3	3,800	97.775	2.276	1.906	0.9
02-Jul-02	6	1,800	97.984	4.470	2.067	0.8	30-Dec-02	6	1,600	99.022	1.981	1.881	1.3
16-Jul-02	12	1,800	95.753	4.448	1.714	0.5	14-Jan-03	12	1,700	97.973	2.151	1.706	1.3
16-Jul-02	3	4,400	98.894	4.164	1.910	0.3	14-Jan-03	3	4,100	99.492	1.901	1.810	1.2
16-Jul-02	6	1,800	97.918	4.265	2.194	0.8	14-Jan-03	6	1,700	99.105	1.961	1.989	0.7
30-Jul-02	12	1,900	96.121	4.209	2.045	0.5	28-Jan-03	12	1,900	99.475	1.966	1.935	1.0
30-Jul-02	6	1,900	98.166	4.058	2.092	0.6	28-Jan-03	3	4,700	97.619	2.446	1.955	0.9
30-Jul-02	3	4,700	98.930	4.029	2.056	0.6	28-Jan-03	6	1,900	98.953	2.122	2.006	0.6
13-Aug-02	12	1,800	96.078	4.093	1.822	0.7	11-Feb-03	12	1,700	97.673	2.484	1.842	0.8
13-Aug-02	3	4,400	98.951	3.950	1.825	0.8	11-Feb-03	3	4,100	99.019	2.152	2.085	0.8
13-Aug-02	6	1,800	98.059	3.969	2.077	0.8	11-Feb-03	6	1,700	99.466	2.001	1.903	0.9
27-Aug-02	12	1,800	96.394	3.901	2.228	0.4	25-Feb-03	12	1,900	99.447	2.070	1.747	1.0
27-Aug-02	3	4,400	98.264	3.838	2.288	0.7	25-Feb-03	3	4,700	98.903	2.224	1.790	0.6
27-Aug-02	6	1,800	98.989	3.805	1.754	0.9	25-Feb-03	6	1,900	97.436	2.639	1.650	1.1
10-Sep-02	12	1,800	96.742	3.377	1.957	1.3	11-Mar-03	12	1,900	97.158	3.050	1.601	2.0
10-Sep-02	3	4,400	99.109	3.348	1.657	10.2	11-Mar-03	3	4,700	98.891	2.436	1.791	1.3
10-Sep-02	6	1,800	98.342	3.381	1.828	2.3	11-Mar-03	6	1,900	99.426	2.152	1.881	0.8
24-Sep-02	12	1,800	99.191	3.039	1.802	1.1	25-Mar-03	12	1,900	98.659	2.725	2.058	0.7
24-Sep-02	3	4,400	97.214	2.989	2.092	0.9	25-Mar-03	3	4,700	99.375	2.343	2.005	0.7
24-Sep-02	6	1,800	98.649	2.975	2.149	0.5	25-Mar-03	6	1,900	96.643	3.483	2.077	0.7
							Total		**213,000**				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

Source: Bank of Canada.

Reference Table VIII

Fiscal 2002–03 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Fixed-coupon bonds						
2002	**2002**					
	April 1		5,450	–	–	-5,450
April 17	April 22	June 1, 2012	–	2,400	150	2,250
	May 1		1,662	–	–	-1,662
May 1[1]	May 6	June 1, 2033	–	500	477	23
May 15	May 21	September 1, 2007	–	2,400	500	1,900
May 29	May 31	December 1, 2004	–	3,500	700	2,800
	June 1		4,000	–	–	-4,000
June 19[1]	June 25	June 1, 2012	–	500	357	143
July 10	July 15	June 1, 2033	–	1,900	600	1,300
July 17[1]	July 22	September 1, 2007	–	600	647	-47
July 31	August 6	June 1, 2012	–	2,500	600	1,900
August 14	August 19	September 1, 2007	–	2,400	473	1,927
August 28	August 30	December 1, 2004		3,000	700	2,300
	September 3		7,330	–	–	-7,330
September 25[1]	September 30	June 1, 2012	–	600	372	228
October 9[1]	October 15	June 1, 2012	–	600	294	306
October 30	November 4	June 1, 2013	–	2,400	600	1,800
November 13	November 18	September 1, 2008	–	2,400	246	2,154
November 20[1]	November 25	June 1, 2033	–	400	390	10
November 27	November 29	June 1, 2005	–	3,500	700	2,800
	December 2		4,000	–	–	-4,000
December 11[1]	December 16	June 1, 2013	1,068	600	329	-797
December 18[1]	December 23	September 1, 2008	–	400	432	-32
2003	**2003**					
January 15	January 20	June 1, 2033	–	1,700	600	1,100
January 30[1]	February 3	June 1, 2005	1,717	400	486	-1,803
February 5	February 10	June 1, 2013	–	2,400	153	2,247
February 19	February 24	September 1, 2008	–	2,400	436	1,964
February 26[1]	March 3	June 1, 2033	–	300	281	19
March 5	March 7	June 1, 2005	–	3,500	608	2,892
March 19[1]	March 24	June 1, 2013	–	600	443	157
March 26[1]	March 31	September 1, 2008	–	400	491	-91

Reference Table VIII *(cont'd)*
Fiscal 2002–03 Canadian-Dollar Marketable Bond Program

Offering date	Delivery date	Maturity date	Maturing	Gross	Bond repurchase	Net
				($ millions)		
Real Return Bonds						
2002	**2002**					
June 5	June 10	December 1, 2031	–	400	–	400
September 11	September 16	December 1, 2031	–	300	–	300
December 4	December 9	December 1, 2031	–	400	–	400
2003	**2003**					
March 12	March 17	December 1, 2031	–	300	–	300
Total fiscal year 2002–2003			**25,227**	**43,700**	**12,065**	**6,408**

* Maturing date.

Source: Bank of Canada.

[1] Buyback on a switch basis.

Reference Table IX

Fiscal 2002–2003 Marketable Bond Auction Results

Auction date	Term	Maturity date	Coupon rate	Issue amount	Average price	Average yield	Auction coverage	Tail
	(years)		(%)	($ millions)	($)	(%)		(basis points)
17-Apr-02	10	1-Jun-12	5.25	2,400	96.445	5.717	2.41	0.8
15-May-02	5	1-Sep-07	4.50	2,400	96.136	5.348	2.43	1.0
29-May-02	2	1-Dec-04	4.25	3,500	99.503	4.462	2.34	0.8
05-Jun-02	30	1-Dec-31	4.00*	400	108.954	3.510	3.26	n/a
10-Jul-02	30	1-Jun-33	5.75	1,900	99.978	5.751	2.36	0.9
31-Jul-02	10	1-Jun-12	5.25	2,500	99.356	5.334	2.64	1.1
14-Aug-02	5	1-Sep-07	4.50	2,400	100.936	4.291	2.43	0.8
28-Aug-02	2	1-Dec-04	4.25	3,000	101.109	3.730	2.31	0.5
11-Sep-02	30	1-Dec-31	4.00*	300	112.710	3.317	3.08	n/a
30-Oct-02	10	1-Jun-13	5.25	2,400	99.476	5.316	2.43	1.0
13-Nov-02	5	1-Sep-08	4.25	2,400	98.780	4.493	2.43	0.5
27-Nov-02	2	1-Jun-05	3.50	3,500	99.500	3.711	2.25	0.9
04-Dec-02	30	1-Dec-31	4.00*	400	110.807	3.410	3.00	n/a
15-Jan-03	30	1-Jun-33	5.75	1,700	104.162	5.467	2.74	0.6
05-Feb-03	10	1-Jun-13	5.25	2,400	100.848	5.142	2.49	0.3
19-Feb-03	5	1-Sep-08	4.25	2,400	98.710	4.517	2.49	0.3
05-Mar-03	2	1-Jun-05	3.50	3,500	99.588	3.692	2.42	0.6
12-Mar-03	30	1-Dec-31	4.00*	300	124.267	2.769	3.31	n/a
Total				**37,800**				

Note: Coverage is defined as the ratio of total bids at auction to the amount auctioned. Tail is defined as the high accepted yield minus the average yield.

* Real return bonds.

Source: Department of Finance.

Reference Table X

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2003

Maturity date	Amount	Coupon rate	Maturity date	Amount	Coupon rate
	($ millions)	(%)		($ millions)	(%)
Fixed-coupon					
01-Jun-03	1,124	5.75	01-Jun-08	9,030	6.00
01-Jun-03	6,505	7.25	01-Jun-08	3,258	10.00
01-Sep-03	8,230	5.25	01-Sep-08	5,600	4.25
01-Oct-03	452	9.50	01-Oct-08	425	11.75
01-Dec-03	5,907	5.00	01-Mar-09	246	11.50
01-Dec-03	8,579	7.50	01-Jun-09	9,380	5.50
01-Feb-04	929	10.25	01-Jun-09	669	11.00
01-Jun-04	7,000	3.50	01-Oct-09	330	10.75
01-Jun-04	7,900	6.50	01-Mar-10	89	9.75
01-Jun-04	541	13.50	01-Jun-10	10,400	5.50
01-Sep-04	10,377	5.00	01-Jun-10	2,473	9.50
01-Oct-04	274	10.50	01-Oct-10	142	8.75
01-Dec-04	6,500	4.25	01-Mar-11	710	9.00
01-Dec-04	7,700	9.00	01-Jun-11	15,000	6.00
01-Mar-05	497	12.00	01-Jun-11	669	8.50
01-Jun-05	7,400	3.50	01-Jun-12	11,600	5.25
01-Sep-05	10,920	6.00	01-Jun-13	6,000	10.25
01-Sep-05	1,065	12.25	15-Mar-14	2,169	11.25
01-Dec-05	6,548	8.75	01-Jun-15	1,232	10.50
01-Mar-06	276	12.75	15-Mar-21	1,392	10.50
01-Sep-06	10,000	5.75	01-Jun-21	2,079	9.75
01-Oct-06	771	14.00	01-Jun-22	899	9.25
01-Dec-06	7,040	7.00	01-Jun-23	8,054	8.00
01-Mar-07	205	13.75	01-Jun-25	8,738	9.00
01-Jun-07	8,806	7.25	01-Jun-27	9,323	8.00
01-Sep-07	10,400	4.50	01-Jun-29	13,900	5.75
01-Oct-07	485	13.00	01-Jun-33	9,200	5.75
01-Mar-08	624	12.75	**Total**	**270,062**	

Reference Table X *(cont'd)*

Outstanding Government of Canada Canadian-Dollar Marketable Bonds as at March 31, 2003

Maturity date	Amount	Coupon rate
	($ millions)	(%)
Real return bonds		
01-Dec-2021	5,175	4.25
01-Dec-2026	5,250	4.25
01-Dec-2031	5,800	4.00
Total[1]	**16,225**	

[1] Real return bond figures show gross issue amount only—the consumer price index adjustment is not shown here.

Source: Bank of Canada.

Reference Table XI

Government of Canada Swaps Outstanding as at March 31, 2003

Domestic interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	($ millions)
01-Feb-2004	10.25	50
Total		**50**

Foreign interest-rate swaps

Maturity date	Coupon[1]	Notional amount
	(%)	(US$ millions)
19-Nov-2007	4.00	25
05-Nov-2008	5.25	200
05-Nov-2008	5.25	500
05-Nov-2008	5.25	500
Total		**1,225**

Cross-currency swaps of foreign obligations

Maturity date	Notional amount
	(US$ millions)
16-Jul-2003	65
26-Nov-2004	495
26-Nov-2004	341
30-Nov-2004	63
30-Nov-2004	25
22-Dec-2004	76
03-Oct-2007	319
31-Jan-2008	44
Total	**1,428**

[1] Refers to the coupon of the underlying bond that was swapped.

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2003

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Sep-03	55.00	EUR	01-Jun-04	55.00	EUR
01-Sep-03	55.00	EUR	01-Jun-04	55.00	EUR
02-Sep-03	50.00	USD	01-Jun-04	55.00	EUR
02-Sep-03	50.00	USD	01-Jun-04	55.00	EUR
02-Sep-03	50.00	USD	01-Jun-04	100.00	USD
01-Oct-03	76.00	EUR	01-Jun-04	50.00	USD
01-Oct-03	109.00	EUR	01-Jun-04	100.00	USD
01-Oct-03	65.00	USD	01-Jun-04	50.00	USD
01-Dec-03	55.00	EUR	01-Jun-04	50.00	USD
01-Dec-03	55.00	EUR	01-Sep-04	55.00	EUR
01-Dec-03	55.00	EUR	01-Sep-04	61.00	EUR
01-Dec-03	325.00	USD	01-Sep-04	55.00	EUR
01-Dec-03	65.00	USD	01-Sep-04	55.00	EUR
01-Dec-03	65.00	USD	01-Oct-04	55.00	EUR
01-Dec-03	65.00	USD	01-Oct-04	50.00	USD
01-Feb-04	38.00	EUR	01-Oct-04	75.00	USD
01-Feb-04	55.00	EUR	01-Oct-04	111.00	USD
01-Feb-04	55.00	EUR	01-Oct-04	55.00	USD
01-Feb-04	55.00	EUR	01-Dec-04	55.00	EUR
01-Feb-04	55.00	EUR	01-Dec-04	82.00	EUR
01-Feb-04	100.00	USD	01-Mar-05	55.00	EUR
01-Feb-04	75.00	USD	01-Mar-05	250.00	USD
01-Feb-04	100.00	USD	01-Mar-05	65.00	USD
01-Feb-04	100.00	USD	01-Mar-05	250.00	USD
01-Feb-04	50.00	USD	01-Sep-05	55.00	EUR
01-Feb-04	50.00	USD	01-Sep-05	55.00	EUR
01-Feb-04	50.00	USD	01-Sep-05	33.00	EUR
01-Jun-04	82.00	EUR	01-Sep-05	33.00	EUR
01-Jun-04	55.00	EUR	01-Sep-05	55.00	EUR
01-Jun-04	55.00	EUR	01-Sep-05	82.00	EUR
01-Jun-04	82.00	EUR	01-Sep-05	82.00	EUR
01-Jun-04	55.00	EUR	01-Sep-05	82.00	EUR
01-Jun-04	55.00	EUR	01-Sep-05	82.00	EUR

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2003

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Sep-05	82.00	EUR	01-Sep-06	55.00	EUR
01-Sep-05	100.00	USD	01-Oct-06	55.00	EUR
01-Dec-05	55.00	EUR	01-Oct-06	50.00	USD
01-Dec-05	55.00	EUR	01-Oct-06	50.00	USD
01-Dec-05	55.00	EUR	01-Dec-06	55.00	EUR
01-Dec-05	55.00	EUR	01-Dec-06	55.00	EUR
01-Dec-05	55.00	EUR	01-Dec-06	82.00	EUR
01-Dec-05	55.00	EUR	01-Dec-06	82.00	EUR
01-Dec-05	82.00	EUR	01-Dec-06	55.00	USD
01-Dec-05	55.00	EUR	01-Mar-07	27.00	EUR
01-Dec-05	55.00	EUR	01-Jun-07	55.00	EUR
01-Dec-05	55.00	EUR	01-Jun-07	55.00	EUR
01-Dec-05	55.00	EUR	01-Jun-07	109.00	EUR
01-Dec-05	55.00	EUR	01-Jun-07	55.00	EUR
01-Dec-05	55.00	EUR	01-Jun-07	250.00	USD
01-Dec-05	55.00	EUR	01-Jun-07	250.00	USD
01-Dec-05	55.00	EUR	01-Jun-07	250.00	USD
01-Dec-05	55.00	EUR	01-Oct-07	55.00	EUR
01-Dec-05	55.00	EUR	01-Oct-07	55.00	EUR
01-Dec-05	82.00	EUR	01-Oct-07	55.00	EUR
01-Dec-05	82.00	EUR	01-Oct-07	27.00	EUR
01-Dec-05	50.00	USD	01-Mar-08	82.00	EUR
01-Dec-05	50.00	USD	01-Mar-08	55.00	EUR
01-Dec-05	50.00	USD	01-Mar-08	75.00	USD
01-Dec-05	54.00	USD	01-Mar-08	100.00	USD
01-Dec-05	500.00	USD	01-Mar-08	50.00	USD
01-Mar-06	55.00	EUR	01-Mar-08	200.00	USD
01-Mar-06	82.00	EUR	01-Mar-08	50.00	USD
01-Mar-06	82.00	EUR	01-Mar-08	50.00	USD
01-Mar-06	55.00	EUR	01-Jun-08	55.00	EUR
01-Mar-06	55.00	EUR	01-Jun-08	55.00	EUR
01-Mar-06	50.00	USD	01-Jun-08	55.00	EUR
01-Mar-06	54.00	USD	01-Jun-08	55.00	EUR

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2003

Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid
	(US$ millions)	
01-Jun-08	250.00	USD
01-Jun-08	100.00	USD
01-Jun-08	100.00	USD
01-Jun-08	100.00	USD
01-Jun-08	50.00	USD
01-Jun-08	100.00	USD
01-Jun-08	50.00	USD
01-Jun-08	50.00	USD
01-Oct-08	82.00	EUR
01-Oct-08	82.00	EUR
01-Oct-08	55.00	EUR
01-Oct-08	55.00	EUR
01-Oct-08	70.00	USD
01-Oct-08	70.00	USD
01-Oct-08	50.00	USD
01-Mar-09	82.00	EUR
01-Mar-09	55.00	EUR
01-Mar-09	70.00	USD
01-Mar-09	65.00	USD
01-Mar-09	50.00	USD
01-Mar-09	75.00	USD
01-Mar-09	50.00	USD
01-Mar-09	50.00	USD
01-Mar-09	100.00	USD
01-Mar-09	75.00	USD
01-Jun-09	55.00	EUR
01-Jun-09	82.00	EUR
01-Jun-09	55.00	EUR
01-Jun-09	82.00	EUR
01-Jun-09	82.00	EUR
01-Jun-09	82.00	EUR
01-Jun-09	55.00	EUR
01-Jun-09	82.00	EUR

Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid
	(US$ millions)	
01-Jun-09	50.00	USD
01-Jun-09	70.00	USD
01-Jun-09	100.00	USD
01-Jun-09	50.00	USD
01-Jun-09	100.00	USD
01-Jun-09	70.00	USD
01-Jun-09	65.00	USD
01-Oct-09	109.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	82.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	55.00	EUR
01-Oct-09	82.00	EUR
01-Oct-09	81.00	USD
01-Oct-09	81.00	USD
01-Oct-09	70.00	USD
01-Oct-09	83.00	USD
01-Oct-09	75.00	USD
01-Mar-10	55.00	EUR
01-Mar-10	55.00	EUR
01-Mar-10	55.00	EUR
01-Mar-10	55.00	EUR
01-Mar-10	82.00	EUR
01-Jun-10	55.00	EUR

Reference Table XI *(cont'd)*

Government of Canada Swaps Outstanding as at March 31, 2003

Cross-currency swaps of domestic obligations			Cross-currency swaps of domestic obligations		
Maturity date	Notional amount	Currency paid	Maturity date	Notional amount	Currency paid
	(US$ millions)			(US$ millions)	
01-Jun-10	55.00	EUR	01-Oct-10	82.00	EUR
01-Jun-10	44.00	EUR	01-Oct-10	50.00	USD
01-Jun-10	33.00	EUR	01-Mar-11	75.00	USD
01-Jun-10	55.00	EUR	01-Mar-11	75.00	USD
01-Jun-10	55.00	EUR	01-Mar-11	75.00	USD
01-Jun-10	55.00	EUR	01-Mar-11	50.00	USD
01-Jun-10	55.00	EUR	01-Mar-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	55.00	EUR
01-Jun-10	55.00	EUR	01-Jun-11	55.00	EUR
01-Jun-10	55.00	EUR	01-Jun-11	82.00	EUR
01-Jun-10	55.00	EUR	01-Jun-11	75.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	55.00	EUR	01-Jun-11	50.00	USD
01-Jun-10	68.00	JPY	01-Jun-11	50.00	USD
01-Oct-10	44.00	EUR	01-Jun-12	55.00	EUR
01-Oct-10	82.00	EUR	01-Jun-12	55.00	EUR
01-Oct-10	55.00	EUR	01-Jun-12	50.00	USD
01-Oct-10	55.00	EUR	01-Jun-12	50.00	USD
01-Oct-10	55.00	EUR	01-Jun-12	50.00	USD
01-Oct-10	55.00	EUR	01-Jun-12	50.00	USD
01-Oct-10	82.00	EUR	01-Jun-12	50.00	USD
01-Oct-10	82.00	EUR	**Total**	**17,539.00**	

Note: Numbers may not add due to rounding.

Source: Department of Finance.

Reference Table XII

Bond Buyback Program—Operations 2002–2003

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
Buyback on cash basis			
17-Apr-02	01-Mar-09	11.5	2
	01-Jun-09	5.5	20
	01-Oct-09	10.75	20
	01-Mar-10	9.75	7
	01-Oct-10	8.75	9
	01-Mar-11	9	56
	15-Mar-14	10.25	36
	Total		**150**
15-May-02	01-Mar-05	12	9
	01-Dec-05	8.75	213
	01-Mar-06	12.5	6
	01-Oct-06	14	21
	01-Dec-06	7	155
	01-Mar-07	13.75	1
	01-Jun-07	7.25	82
	01-Oct-07	13	3
	01-Mar-09	11.5	4
	01-Oct-09	10.75	5
	Total		**499**
29-May-02	01-Jun-03	7.25	73
	01-Sep-03	5.25	160
	01-Feb-04	10.25	2
	01-Sep-04	5	15
	01-Dec-05	8.75	375
	01-Dec-06	7	75
	Total		**700**
10-Jul-02	01-Jun-21	9.75	296
	01-Jun-22	9.25	304
	Total		**600**
31-Jul-02	01-Jun-09	11	2
	01-Mar-11	9	23
	15-Mar-14	10.25	317
	01-Jun-15	11.25	221
	15-Mar-21	10.5	32
	01-Jun-21	9.75	1
	01-Jun-22	9.25	4
	Total		**600**
14-Aug-02	01-Dec-05	8.75	230
	01-Mar-06	12.5	2
	01-Dec-06	7	175
	01-Jun-07	7.25	60
	01-Oct-08	11.75	3
	01-Mar-09	11.5	3
	Total		**473**
28-Aug-02	01-Oct-04	10.5	5
	01-Mar-05	12	25
	01-Dec-05	8.75	279
	01-Mar-06	12.5	7
	01-Dec-06	7	385
	Total		**701**
30-Oct-02	15-Mar-14	10.25	63
	01-Jun-15	11.25	65
	01-Jun-21	9.75	433
	01-Jun-22	9.25	39
	Total		**600**
13-Nov-02	01-Dec-06	7	149
	01-Jun-07	7.25	30
	01-Jun-08	6	50
	01-Oct-08	11.75	3
	01-Mar-09	11.5	6
	01-Jun-09	11	2
	01-Oct-09	10.75	5
	Total		**246**

Reference Table XII *(cont'd)*

Bond Buyback Program—Operations 2002–2003

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
27-Nov-02	01-Feb-04	10.25	150
	01-Sep-04	5	82
	01-Oct-04	10.5	15
	01-Mar-05	12	44
	01-Dec-05	8.75	355
	01-Mar-06	12.5	3
	01-Dec-06	7	51
	Total		**700**
15-Jan-03	15-Mar-21	10.5	40
	01-Jun-21	9.75	455
	01-Jun-22	9.25	65
	01-Jun-25	9	40
	Total		**600**
05-Feb-03	01-Mar-11	9	39
	15-Mar-21	10.5	47
	01-Jun-21	9.75	17
	01-Jun-22	9.25	50
	Total		**153**
19-Feb-03	01-Dec-06	7	90
	01-Mar-07	13.75	28
	01-Jun-07	7.25	150
	01-Oct-07	13	32
	01-Mar-08	12.75	3
	01-Jun-08	6	120
	01-Oct-08	11.75	13
	Total		**436**
05-Mar-03	01-Sep-04	5	25
	01-Mar-05	12	42
	01-Sep-05	6	180
	01-Mar-06	12.5	13
	01-Dec-06	7	221
	01-Jun-07	7.25	127
	Total		**608**
Total buyback on cash basis			**7,066**
Buyback on switch basis			
01-May-02	15-Mar-21	10.5	60
	01-Jun-21	9.75	172
	01-Jun-22	9.25	102
	01-Jun-23	8	92
	01-Jun-25	9	52
	Total		**477**
19-Jun-02	01-Oct-08	11.75	6
	01-Oct-09	10.75	27
	01-Mar-10	9.75	29
	01-Oct-10	8.75	8
	01-Mar-11	9	58
	01-Jun-15	11.25	230
	Total		**357**
17-Jul-02	01-Oct-06	14	9
	01-Dec-06	7	637
	Total		**647**
25-Sep-02	01-Oct-09	10.75	4
	01-Mar-11	9	10
	01-Jun-15	11.25	358
	Total		**372**

Reference Table XII *(cont'd)*

Bond Buyback Program—Operations 2002–2003

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
09-Oct-02	01-Jun-21	9.75	294
	Total		**294**
20-Nov-02	15-Mar-21	10.5	20
	01-Jun-21	9.75	111
	01-Jun-22	9.25	100
	01-Jun-23	8	49
	01-Jun-25	9	40
	01-Jun-27	8	70
	Total		**390**
11-Dec-02	01-Mar-10	9.75	24
	01-Jun-10	9.5	2
	01-Mar-11	9	10
	15-Mar-21	10.5	103
	01-Jun-21	9.75	120
	01-Jun-22	9.25	70
	Total		**329**
18-Dec-02	01-Dec-06	7	122
	01-Jun-07	7.25	245
	01-Mar-09	11.5	3
	01-Oct-09	10.75	63
	Total		**432**
30-Jan-03	01-Sep-04	5	351
	01-Oct-04	10.5	3
	01-Mar-05	12	98
	01-Mar-06	12.5	28
	01-Oct-06	14	2
	01-Oct-07	13	4
	Total		**486**
26-Feb-03	15-Mar-21	10.5	29
	01-Jun-21	9.75	10
	01-Jun-23	8	5
	01-Jun-25	9	30
	01-Jun-27	8	207
	Total		**281**
19-Mar-03	01-Jun-10	5.5	70
	01-Oct-10	8.75	10
	01-Mar-11	9	25
	15-Mar-14	10.25	51
	01-Jun-15	11.25	267
	15-Mar-21	10.5	20
	Total		**443**
26-Mar-03	01-Dec-06	7	444
	01-Oct-07	13	2
	01-Oct-08	11.75	10
	01-Oct-09	10.75	35
	Total		**491**
Total buyback on switch basis			**5,000**
Cash management bond buyback			
09-Apr-02	01-Jun-02	5.75	45
	01-Sep-02	5.5	388
	01-Dec-02	6	567
	Total		**1,000**
23-Apr-02	01-Jun-02	5.75	1,000
	Total		**1,000**

Reference Table XII *(cont'd)*

Bond Buyback Program—Operations 2002–2003

Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)
07-May-02	01-Jun-02	5.75	117
	Total		**117**
04-Jun-02	01-Sep-02	5.5	75
	01-Dec-02	6	114
	01-Jun-03	5.75	311
	Total		**500**
02-Jul-02	01-Sep-02	5.5	500
	Total		**500**
16-Jul-02	01-Sep-02	5.5	699
	01-Jun-03	5.75	140
	Total		**839**
30-Jul-02	01-Sep-02	5.5	530
	01-Jun-03	5.75	268
	01-Jun-03	7.25	202
	Total		**1,000**
10-Sep-02	01-Dec-02	6	30
	01-Jun-03	7.25	53
	01-Sep-03	5.25	315
	Total		**398**
24-Sep-02	01-Sep-03	5.25	280
	01-Dec-03	5	25
	01-Dec-03	7.5	51
	Total		**356**
08-Oct-02	01-Jun-03	5.75	1,000
	Total		**1,000**
22-Oct-02	01-Jun-03	5.75	810
	01-Sep-03	5.25	185
	01-Dec-03	7.5	5
	Total		**1,000**
05-Nov-02	01-Jun-03	5.75	0
	01-Jun-03	7.25	0
	01-Sep-03	5.25	0
	01-Dec-03	5	0
	01-Dec-03	7.5	0
	Total		**0**
19-Nov-02	01-Dec-03	5	216
	01-Dec-03	7.5	55
	Total		**271**
03-Dec-02	01-Dec-03	5	28
	01-Dec-03	7.5	28
	Total		**56**
17-Dec-02	01-Jun-03	5.75	500
	01-Dec-03	5	500
	Total		**1,000**

Reference Table XII *(cont'd)*
Bond Buyback Program—Operations 2002–2003

Buyback date	Maturity date	Coupon	Repurchased amount	Buyback date	Maturity date	Coupon	Repurchased amount
		(%)	($ millions)			(%)	($ millions)
14-Jan-03	01-Jun-03	5.75	1,000	**11-Mar-03**	01-Jun-03	5.75	150
	Total		**1,000**		01-Sep-03	5.25	57
					01-Dec-03	5	214
28-Jan-03	01-Jun-03	5.75	420		01-Dec-0	37.5	79
	01-Jun-03	7.25	44		**Total**		**500**
	01-Sep-03	5.25	36				
	Total		**500**	**25-Mar-03**	01-Sep-03	5.25	387
					01-Dec-03	5	110
11-Feb-03	01-Jun-03	5.75	977		01-Dec-03	7.5	3
	01-Jun-03	7.25	23		**Total**		**500**
	Total		**1,000**				
				Total cash management bond buyback			**12,887**
25-Feb-03	01-Jun-03	5.75	300				
	01-Sep-03	5.25	50				
	Total		**350**				

Source: Department of Finance.

Reference Table XIII

Canada Savings Bonds and Canada Premium Bonds, Fiscal 1983–84 to Fiscal 2002–2003

Fiscal year	Gross sales	Net change	Outstanding at fiscal year end
		($ millions)	
1983–84	11,584	5,650	38,403
1984–85	12,743	3,764	42,167
1985–86	15,107	2,440	44,607
1986–87	9,191	-22	44,585
1987–88	17,450	8,921	53,506
1988–89	14,962	-5,456	48,050
1989–90	9,338	-6,813	41,237
1990–91	6,720	-6,500	34,737
1991–92	9,588	1,151	35,888
1992–93	9,235	-1,172	34,716
1993–94	5,364	-3,089	31,627
1994–95	7,506	-96	31,531
1995–96	4,612	10	31,541
1996–97	5,747	2,050	33,591
1997–98	4,951	-2,796	30,795
1998–99	4,844	-2,187	28,608
1999–00	2,669	-1,510	27,098
2000–01	3,188	-531	26,567
2001–02	2,700	-2,338	24,229
2002–03	3,500	-1,351	22,878

Note: Figures are in accordance with Bank of Canada audited reports, which may vary from Public Accounts reports due to differences in classification.

Source: Bank of Canada.

Reference Table XIV

Crown Corporation Borrowings as at March 31, 2003

Borrowings from the market

Corporation	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
							($ millions)						
Export Development Corporation	5,685	6,220	6.983	7,793	7,515	7,673	7,820	10,077	12,967	16,888	18,406	20.481	20,375
Canadian Wheat Board[1]	6,449	7,323	6,966	7,283	7,321	6,377	6,474	6,698	6,786	542	425	397	378
Business Development Bank of Canada	2,271	2,249	2,352	2,602	2,723	3,045	3,371	3,839	4,223	4,723	5,102	5,726	6,263
Farm Credit Corporation	1,128	813	797	863	990	1,582	1,926	3,026	4,317	5,083	5,695	7,096	8,082
Canadian National[1]	1,861	1,803	1,905	2,249	2,331	–	–	–	v	–	–	–	–
Canada Mortgage and Housing Corporation	–	96	152	1,573	3,630	5,906	7,866	9,934	10,633	10,801	11,672	11,372	11,091
Canada Development Investment Corporation	612	713	594	473	–	–	–	–	–	–	–	–	–
Petro-Canada Ltd.	1,656	980	455	501	504	490	432	443	471	338	–	–	–
Petro-Canada[1]	718	–	–	–	–	–	–	–	–	–	–	–	–
Canada Ports Corporation	–	200	188	–	–	–	–	3	79	69	–	–	–
Canada Post Corporation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	150	56	63	114
Other	98	96	97	239	235	297	226	258	222	46	44	40	39
Total	**20,478**	**20,493**	**20,489**	**23,576**	**25,249**	**25,370**	**28,115**	**34,278**	**39,698**	**38,640**	**41,400**	**45,175**	**46,342**

[1] This corporation is no longer a Crown corporation.

Source: *Public Accounts of Canada*.

Borrowings from the Consolidated Revenue Fund

Corporation	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
							($ millions)						
Canada Mortgage and Housing Corporation	8,484	8,419	8,181	8,075	7,835	7,263	6,938	6,708	6,298	6,152	5,852	5,696	5,476
Canada Deposit Insurance Corporation	1,225	1,785	3,085	3,151	2,160	1,627	855	395	–	–	–	–	–
Farm Credit Corporation	2,432	2,491	2,420	2,488	2,524	2,310	2,507	1,877	1,041	805	578	–	–
Other	934	975	819	415	307	233	204	179	551	77	84	104	38
Total	**13,075**	**13,670**	**14,505**	**14,129**	**12,826**	**11,433**	**10,504**	**9,159**	**7,890**	**7,034**	**6,514**	**5,727**	**5,446**

Note: Figures do not include “allowance for valuation.”

Source: Public Works and Government Services Canada data.